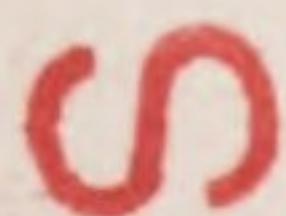


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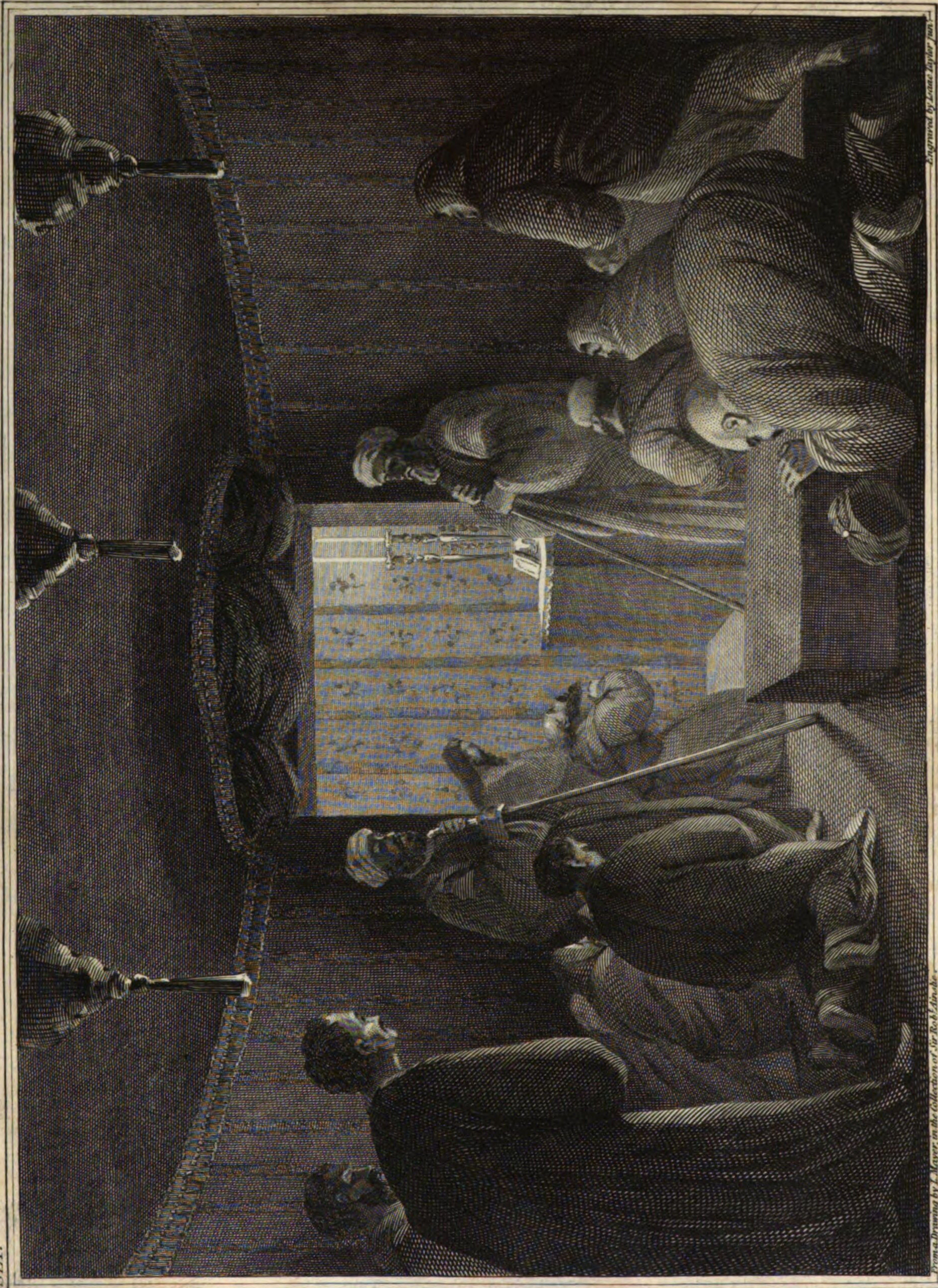
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From a Drawing by L. Mayer, in the Collection of Sir Robt. Adair.

INTERIOR VIEW of the HOLY SEPULCHRE at JERUSALEM.

London. Published June 1. 1823. by C. Taylor. N^o. 208. Hatton Garden.

AN EXPOSITORY INDEX.

1870

PRINTED BY 22, SOUTH BRIDGE, NEWTON, MASSACHUSETTS.

SCRIPTURE ILLUSTRATED,

BY MEANS OF

Natural Science:

IN

BOTANY, GEOLOGY,

GEOGRAPHY, NATURAL HISTORY, NATURAL PHILOSOPHY,

UTENSILS, DOMESTIC AND MILITARY;

HABILIMENTS, MANNERS AND CUSTOMS, &c. &c.

PART I.

AN EXPOSITORY INDEX,

REFERRING TO

SUBJECTS OF SCIENCE,

IN THE ORDER OF THE SACRED BOOKS.

PART II.

ENQUIRIES AND DISCUSSIONS,

INTENDED TO ILLUSTRATE VARIOUS INCIDENTS, &c. MENTIONED IN SCRIPTURE:

ALSO,

AN ATTEMPT TO ASCERTAIN THE SYSTEMATIC ARRANGEMENT OF THE BIBLICAL WRITERS.

With Many Plates.

CONDUCTED PRINCIPALLY

BY THE EDITOR OF CALMET'S DICTIONARY OF THE HOLY BIBLE.

London:

PRINTED BY G. HAZARD, BEECH-STREET;

FOR CHARLES TAYLOR, 108, HATTON-GARDEN.

1814.

Scripture
illustrated

87 BG

BIBLIOTHECA

REGIA

MONACENSIS

BOTANY, GEOLOGY,

GEOGRAPHY, NATURAL HISTORY, NATURAL PHILOSOPHY,

UTENSILS, DOMESTIC AND MILITARY;

THE FOLLOWING MANUSCRIPTS, MANNERS AND CUSTOMS, &c. &c. which contain

particulars of the history of the Jews, and of the various nations of the East;

and of the various parts of the world, and of the various ages of the world;

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TO THE READER.

THE following Work is divided into two Parts; one of which, containing ENGRAVINGS, is published without any present attention to regularity, but merely as convenience permits; yet is so marked, that it may be reduced to order at pleasure. The other division of our Work pursues a regular course, and takes those passages of Holy Writ which it proposes to illustrate, in the order of the Books, as they lie in the Bible.

It cannot have escaped the Reader, that such a Companion, as well to the Bible itself, as to those numerous commentaries which are extant among us, has been long wanted: neither indeed can such an omission well be accounted for, without fully understanding the difficulty of procuring the materials, and the expense of presenting them to the public.

Commentators have generally contented themselves with speculations on WORDS only, without attempting to set THINGS before their readers. We are far from questioning the utility of verbal explications, or of verbal correctness: we believe, and we know, that such studies are of indispensable necessity: nevertheless, we must insist that a knowledge of the SUBJECTS meant to be denoted or distinguished by words, is equally indispensable, in order to understand the very powers and proprieties of words themselves. Unhappily, this department of liberal Biblical science has been less valued than its relative consequence deserves; having been at all times difficult of acquisition, it has been neglected, or unknown, by most of those who, in fact, when they undertook to be teachers, should have been proficient, at least, if not masters, in this branch of knowledge, as well as others.

In proportion to the ignominy of ignorance, is the honour due to those liberal spirits whose studies have embraced that extensive range of natural objects which the DEITY himself has presented to us in the Bible. Aware, that not in

vain had Natural knowledge been made the vehicle of Spiritual communication, by comparison, by allusion, by direct reference, or by very easy inference, they felt the necessity of local information—of information derived from the very places where such communication originated. Suspending all considerations of danger or trouble, of privation or suffering, whether from the absence of personal enjoyments, or the pressure of personal difficulties, they explored, under the equivocal protection of unsettled authority, or the hazardous insolence of the fanatical multitude, that knowledge which has endeared their memories to every Biblical student, who knows the value, and who feels the importance, of scientific correctness and integrity.

Less venturesome, but not less laudable, is the man of study, who directs the application of Natural knowledge to the illustration of those passages in the Bible, which, however easy, when, and where, they were originally communicated, yet to us, who are not only distant in time, place, and manners, but who receive them through the medium of a translation, are involved in Egyptian darkness,—darkness which may be felt. How many passages and phrases, how many sentiments and actions, have been relinquished as unintelligible, and ever must have remained so, but for the observations actually made, and correctly recorded, by judicious travellers; by means of whom, and by the happy application of knowledge in natural things we have seen many obscurities brightened, and many apparent blemishes removed from Holy Writ. Not to mention those ambiguities, equivocations, and doubtfulnesses, which have teased the honest inquirer after truth, if they have not amounted to serious or important difficulties.

Let no man fear, that increase of knowledge will occasion decrease of piety; we deny the fact: it will augment true religion, the religion of the heart though it may indeed diminish superstition, that canker of strong passions, and of weak understandings. Nor let it be said in disparagement, that not every thing proposed as a discovery deserves our reception; this must be freely admitted; we ourselves feel the fact to be true; but we do not therefore reject the whole, because a part may be indifferent, or even trivial. No competent writer would characterize his labours, as infallible; no competent reader would receive such a character with endurance, much less with complacency; but there are infinite gradations between proposing a suggestion for further consideration, and insisting with that firmness of tone and manner which should accompany complete conviction.

viction and certainty only. All human efforts are liable to suffer from those constant attendants on humanity, weakness and error, one or other of which but too often eludes the observation of the most accurate, or surprises the vigilance of the most wary.

That reputation, which has been justly earned by the exertions and the labours of great men, far be it from us to tarnish: on the contrary, it is our boast respecting the work now offered to the public, that the foundation was laid by BOCHART, and the superstructure erected by SCHEUZER: the first a critic of the highest rank, and the most decisive authority; the other a naturalist of most ardent piety, and indefatigable perseverance in his religio-philosophical pursuits. These writers have ever received, and ever will receive, their just tribute of applause: it is not so with that part of our work which is original; in *that* their labours have had no share; and *that* solicits the indulgence of favourable criticism.

But we are encouraged to submit our endeavours to the tribunal of the public, by what we have hitherto enjoyed of its clemency, not to say its favour. We have to recollect, with pleasure, the attention excited by the FRAGMENTS appended to CALMET; and in pursuing the same track which we opened and trod on that occasion, we presume to hope for a continuance, at least, of that support, which we have taken additional pains to deserve. Our wish is to set before the eyes of the reader what he must otherwise consult numerous volumes to procure, and what, when procured, should he be so fortunate, will cost him great labour and much leisure to arrange. We venture, also, to predict, that in no very distant period of time, a compendious digest of natural knowledge will be thought as necessary an appendix to the Holy Bible, as necessary a companion in the study of sacred literature, as an atlas of maps to Geography, or portraits of animals to Natural History. In proportion as the knowledge of the Bible is important, whether we consider its origin or its effects, its injunctions or its prohibitions, its influence on the heart, or its tendency in society; in such proportion the knowledge of natural things, contained in the Bible, is important also. Consider its extent; it ranges through all the kingdoms of nature: consider its accuracy; often it comprises the very *minutiæ* of art; and art, too, enveloped in technical terms. Is it credible that these emanations from the Divine Mind should be useless? should be inserted in the most important of volumes to no purpose? only to perplex the ignorant, and to baffle the simple! The thought is degrading to God, and injurious to

to man: it is worthy of infidelity—it may be fondly cherished by atheism;—and to atheism and infidelity we relinquish it.

There will ever be new discoveries to be made in the Bible; not, indeed, in the principles of faith—they neither desire or admit of novelty; nor perhaps in the explication of those principles—that should not now be supposed unsettled. In the application of historical facts, somewhat new may be attempted, perhaps may be accomplished; but chiefly in Natural Science is much to be expected. Let us rouse our torpid exertions to activity; let us animate our reluctant minds to exercise; let us urge our endeavours to alacrity and perseverance, and we shall find that, having the eyes of our understandings enlightened, we shall see wonderful things in the ways and the works of God; things which may surprise us into terror, or strike us with admiration; may cheer our hearts with joy, or elevate them with gratitude; may make us better men or better Christians; fitter to instruct, or to be instructed; may accompany us through all the relations of life, through all the stations of society, till at length we arrive at those regions where we shall feel, the full power of that pious exclamation—

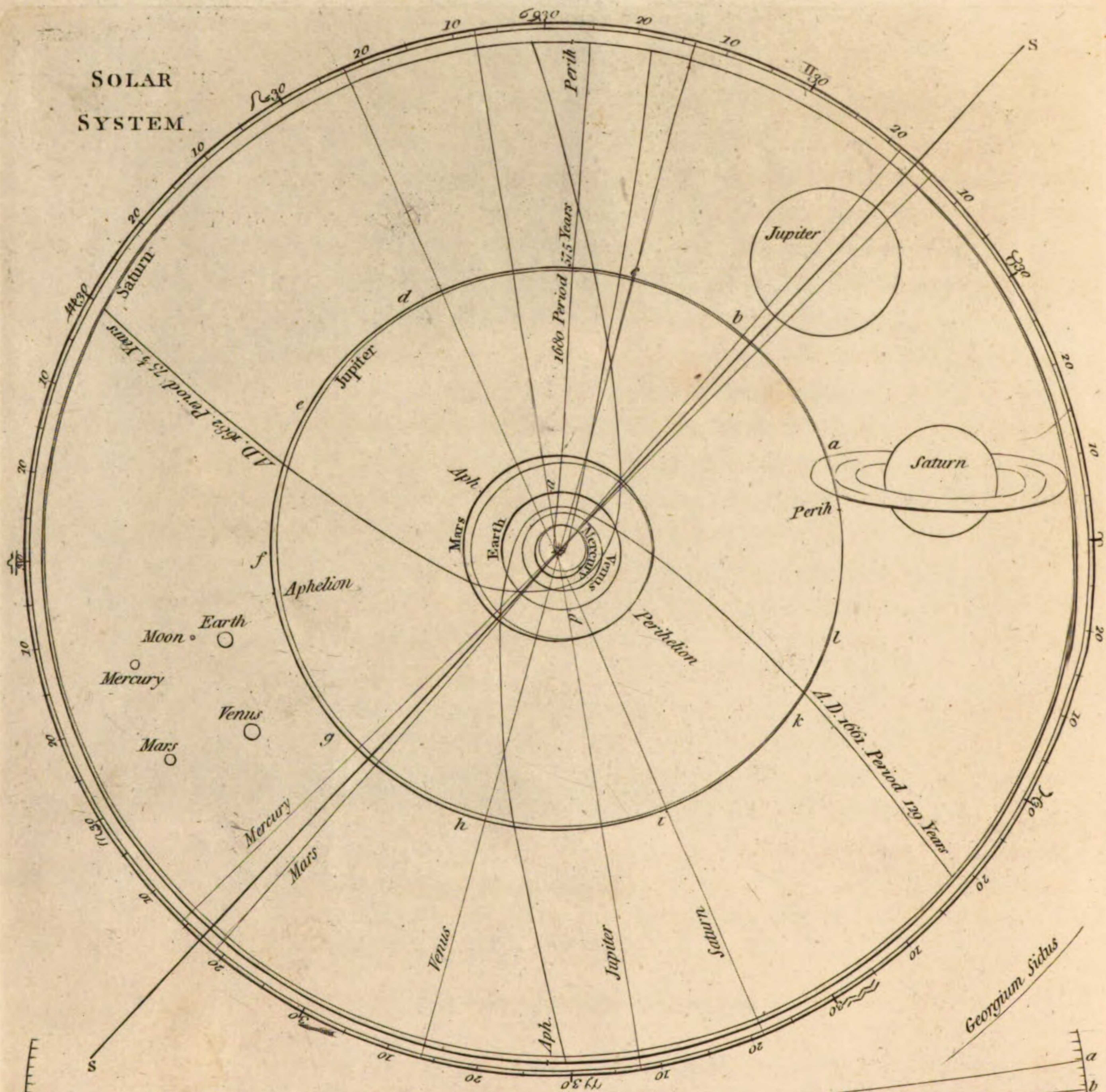
“O the depth of the riches,
Both of the wisdom and knowledge of God!
How unsearchable are his judgments,
And his ways past finding out!
For who hath known the mind of the Lord?
Or who hath been his counsellor?
Or who hath first given to Him?
And it shall be recompensed to him again.
FOR OF HIM, AND THROUGH HIM, AND TO HIM, ARE ALL THINGS:
TO WHOM BE GLORY FOR EVER! AMEN!”

TO THE BINDER.

The manner of making up the Dissertation part of this Work, with the Plates, is by collating the signature marks, which, instead of being letters, are references to the Books in the Bible. Make up in the order of those Books:—Genesis, Exodus, &c. Place first the EXPOSITORY INDEX, next the DISSERTATIONS; and lastly the Systematic Order of NATURAL HISTORY.

*** The GEOGRAPHY OF THE HOLY BIBLE, with many Maps and Plates; by the same Authors as the present Work, and the Additions to CALMET'S DICTIONARY OF THE HOLY BIBLE, is now complete in six PARTS, price 5s. each; making one Volume in Quarto.

SOLAR
SYSTEM.



ORBITS of the PLANETS

a, Mercury. b, Venus. c, Saturn. d, Mars. e, Jupiter.

HEAVEN. Genesis I. 1.

AN EXPOSITORY INDEX;

REFERRING TO SUCH PASSAGES IN THE BOOK OF

GENESIS,

AS MAY BE ILLUSTRATED BY MEANS OF NATURAL SCIENCE.

CHAPTER I. VERSE I.

*I*N the beginning GOD created—COMPOSED the WHOLE (ON, AT) heaven—and the WHOLE earth: this word *whole* has been omitted in our translation, yet the insertion of it seems necessary; and it seems to give the sense of *but* to the following; BUT the earth was without form and void, till that period of which the following history is about to treat.

The Hebrew word rendered *to create*, signifies to *arrange*, to *compose* into order: a production, whether from former materials or not.

The Heaven. This word is plural in our language, as well as in the Hebrew; and signifies several *heaven*. In the present instance it means: 1. The fixed stars, in their variously-distant stations, from each other, and from the earth. 2. More immediately, the planetary system, of which our earth is a member: the planets which circulate around the sun, as a center.

The Planets are really globes of land and water, like our earth, but, by reason of their distance from us, we perceive them only by their refulgence, and to ordinary observation they appear as so many stars, among the firmament stars. Moreover, though there be several secondary planets, and likewise numerous comets, connected with our system, yet, as these are not visible to us, like the primary planets, they might or might not, be referred to by the sacred writer, under the term *Heaven*, though the visible planets might be.

Now, as we must admit that the Spirit of Inspiration which guided the Holy Penman, formed the whole of this system of planets, further still, as we must admit, that the historian himself knew of these planets, because they were generally known and studied at the time when he wrote, so we must infer the probability that he would mention them in his history, together with the earth, to which they are related; because, otherwise his narration would have been both disorderly and imperfect.

As we shall have many occasions to refer to these planets, under the appellation *Heaven*, we insert a plate of them, in order to fix an idea of

EDIT. 2.

their nature, and some of their proportions and properties, on the mind of the reader; and also to shew their relation to the earth.

SOLAR SYSTEM:

EXPLANATION OF THE PLATE.

This plate comprises as complete a view of the solar system, as perhaps can be contrived in one delineation. It is to be considered as containing,

I. A PLAN of the orbits of the Planets which are comprized in the Solar System.

II. The PROPORTIONS of the Planets to the Sun: which is the *center of their circulation*.

III. An ELEVATION of the orbits of the Planets, supposed to be seen from the Sun.

IV. The places of the NODES (*intersections*) of the planetary orbits, with the orbit of the earth.

V. A specimen of the contradictory orbits of Comets: whose courses are not *circular*, but of extreme length: at one time approaching the Sun very closely; at another receding to an almost incalculable distance from the Sun.

There are also other very small bodies, the orbits of which cross those of the planets, at various angles: but these are not, it is presumed, alluded to in SCRIPTURE.

I. In the centre of the system is the Sun; around whom revolve (1.) MERCURY; the orbit of this planet is at one time much farther from the sun than at another; the thin line on the plate denotes a really circular course; the black line marks the actual course of this Planet.

2. VENUS; her orbit is nearly circular.

3. The EARTH; her orbit is also nearly circular; her aphelion is marked *a*, her perihelion *p*.

4. MARS; his orbit has considerable eccentricity: his actual course is distinguished by its strength.

* * * Several very small Planets are lately discovered, revolving between MARS and JUPITER.

5. The orbit of JUPITER.

6. The orbit of SATURN.

Of the GEORGIUM SIDUS, the seventh planet, the Plate only hints a notice. His orbit exceeds twice the distance of that of Saturn; and had it

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been

been truly laid down, would have diminished the courses of the inferior planets, so as to have rendered them very small. We have therefore preferred inaccuracy in marking the place of this orbit, to confusion in all the others.

All the Planets move the same way, and, seen from the Sun, appear to go round him (as the Sun himself revolves) from right to left; according to the order of the letters marked on the orbit of Jupiter, *a, b, c, d, e, f, g, h, i, k, l*.

Around these orbits are placed the characters of the twelve signs and their degrees; these serve equally to all the planets, so that as well Mercury, as Saturn, is said to be in a particular sign, when seen from any station he appears among the firmament stars which compose that sign.

N. B. *The degrees of the signs are reckoned from sign to sign, each containing thirty degrees: and not from any specific point, continued throughout the circle.*

II. The proportion of the planets to the sun, appears by a comparison of them with the line S S; which represents the diameter of the solar orb.—The real dimensions of these bodies are as follows:

MERCURY, the nearest Planet to the Sun is in bulk the smallest of the planets, being in diameter only 2,160—but some say—2,600 miles. His light is extremely bright and lively, owing probably to his nearness to the sun. He circulates round the sun in 87 days, 23 hours, 16 minutes; travelling 95,000 miles *per hour*. He has no moon.

VENUS, (our EVENING star) the next planet to Mercury, moves in nearly a circle round the Sun; her axis is somewhat inclined to the plane of her orbit. Her bulk is nearly that of the earth, about 8,000 miles in diameter; her light is splendid; no moon has yet been discovered to accompany her; she circulates round the sun in 224 days, 16 hours, 49 minutes; at the rate of 69,000 miles *per hour*. Spots have been seen on her surface, which indicate a daily rotation on her axis in 23 hours; but some have given for her rotation 24 days, 8 hours. Instead of revolving from west to east, as the earth does, *i. e.* nearly with a *horizontal* motion, she revolves almost north and south, *i. e.* with a motion within 7 degrees of *perpendicular*.

The EARTH moves in nearly a circle round the Sun (her eccentricity being only 17 parts in 1,000) in one year: her axis is inclined to the plane of her orbit, 23 degrees, 30 minutes: her diameter is about 7,950 miles: she has a daily rotation on her axis in twenty-four hours; travels 68,000 miles *per hour*. The Earth has one moon, which circulates round her in 29 days, 12 hours, 44 minutes, turning in the same time on her own axis, and shewing spots: her diameter is about 2,180 miles.

MARS has an eccentricity of nearly one-tenth part of the semidiameter of his orbit; his axis is not perceptibly inclined to the plane of his orbit: his diameter is 4,500 miles; he has no moon, but a very large and dense atmosphere, which probably performs some of the offices of such an attendant. His daily rotation on his axis is performed in 24 hours, 40 minutes, as is calculated by his spots: he circulates in 686 days, 23 hours: travelling 47,000 miles *per hour*.

JUPITER's eccentricity is about one-twentieth part of the semi-diameter of his orbit (48 parts in 1000); his axis is nearly in the plane of his orbit; his diameter is 81,000 miles, being by much the largest of the planets, and ten times the diameter of our earth. He circulates in 11 years, 314 days, 12 hours, moving 25,000 miles *per hour*.

His spots are so considerable, and occupy so great a part of his surface, and lie in such directions across him, that they are denominated *Belts*: their real nature is not determinately ascertained; but they are thought to be either clouds or tides. Their appearance often varies. His daily rotation is performed in 9 hours 56 minutes. The figure of Jupiter is not that of an exact globe; his diameter, at his equator, being longer than his diameter between his poles, as 13 to 12, the difference is 6,230 miles.

Jupiter has four moons, or *secondary* planets, called *Satellites*, all of which are visible by the *telescope*.

The *first*, distant from his body $5\frac{3}{4}$ semi-diameters of the planet; revolves in 1 day $\frac{1}{4}$.

The *second*, distant nine semi-diameters; revolves in three days and rather more than a half.

The *third*, upwards of fourteen semi-diameters and a quarter distant; revolves in 7 days, $3\frac{1}{2}$ hours.

The *fourth*, twenty-five semi-diameters and a quarter distant; revolves in 16 days and nearly $\frac{1}{2}$.

SATURN's eccentricity is rather more than one-twentieth part of the semi-diameter of his orbit (55 parts in 1000); his diameter is 67,000 miles; which is 14,000 less than Jupiter: he circulates in 29 years, 167 days, 5 hours, moving 18,000 miles *per hour*. He has several moons.

The *first*, distant from his body, nearly five semi-diameters of the planet; revolves in less than two days.

The *second*, distant six semi-diameters and a quarter; revolves in 2 days, 17 hours $\frac{1}{4}$.

The *third*, distant eight semi-diameters and three-quarters; revolves in four days and a half.

The *fourth*, distant twenty semi-diameters and a quarter; revolves in 15 days, 22 hours, 41 min.

The *fifth*, distant fifty-nine semi-diameters and upwards; revolves in 79 days, 7 hours $\frac{1}{4}$.

Dr.

Dr. HERSCHELL has discovered two more satellites to Saturn; revolving in the plane of the *Ring*, within the former first satellite; their periods are—of the 6th Satellite 1 day, 8 hours, 53 min.—of the 7th Satellite, 22 hours, 37 min. 22 sec.

Beside these seven moons, Saturn has a wonderful *Ring*, which encompasses his body at 20,000 miles distance from it, and is resplendent. His daily rotation is not determined, his distance rendering his spots very obscure, His ring is thought to have a rotation, and to be 20,000 miles across. In proportion to the planet, the ring is about twice and one-third his diameter; it revolves in about 10 hours, 32 min.

Of the GEORGIUM SIDUS, the mean distance from the Sun is nearly twenty times the distance of the earth from the Sun. The inclination of his orbit is $46^{\circ} 26'$ min. The period in which he circulates round the sun is 83 years 16 days; his diameter is four times and one-third that of the earth: his bulk is eighty times and a half that of the earth.

Two satellites have been discovered belonging to this planet; of the first the period is 8 days, 17 hours, 1 min. of the second the period is 13 days 11 hours, 5 min. His orbit is inclined to the ecliptic— 90° .

This planet, by his great distance and weak light, was unknown till the powerful telescopes of Mr. HERSCHEL discovered him; consequently the ancients were entirely unacquainted with him.

III. ELEVATION of the orbit of the Planets, as seen from the Sun. These are estimated by comparison with the orbit of the Earth, from which the orbit of Mercury differs more than that of any other planet; it is, therefore, at once the smallest, and the most irregular,—as his eccentricity is greatest, and—as the elevation, and depression of his course is also greatest. The orbit of Jupiter differs but little from that of the earth. In fact, with regard to what differences *might* have existed, the planetary courses (excepting the Georgian) may be regarded as nearly similar. Their quantities of variation from the ecliptic are, as follows:

Mercury $6^{\circ} 59' 20''$	Jupiter $2^{\circ} 20'$
Venus $3^{\circ} 23' 5''$	Saturn $2^{\circ} 33' 30''$
Mars $1^{\circ} 52'$	Georgian 90°

IV. As the foregoing figure it under a necessity of supposing (what is false in fact), that the courses of the planets cross each other [*i. e.* form knots or *nodes*] in the middle of the elevation, it is the design of the thin lines, marked with the names of the planets, to correct this idea; accordingly, by attending to them, it appears, that the intersections of the planes of the planetary orbits with that of the earth, *i. e.* their *nodes* [such planes supposed to

be extended so as to meet the earth's orbit], are as follows:

$14^{\circ} 43'$	The ascending node of Mercury in γ (Taurus)
$13^{\circ} 59'$	- - - of Venus in π (Gemini)
$17^{\circ} 17'$	- - - of Mars in γ (Taurus)
$7^{\circ} 29'$	- - - of Jupiter in α (Cancer)
$21^{\circ} 13'$	- - - of Saturn in α (Cancer)

The descending nodes are of necessity diametrically opposite to the ascending, and are marked on the plate by the names of the planets at length.

The computation of the planetary distances is,

	Miles.	In round numbers.
MERCURY -	36,841,500	37,000,000
VENUS -	68,891,500	69,000,000
EARTH -	95,173,000	95,000,000
MARS -	145,014,000	145,000,000
JUPITER -	494,991,000	495,000,000
SATURN -	907,956,000	908,000,000
GEORGIAN	1,900,000,000	from the Sun.

V. This plate exhibits also tracks of three COMETS, as specimens of the irregularity with which these bodies advance toward the sun on all sides: some from the right-hand, some from the left; some ascending from below, some descending from above. Such courses as are most *round*, are most speedily terminated; while such as are *oblong*, and almost, as it were, parallel, are of very extensive duration. The number of comets is great.

We have thus explained what the term *Heaven* imports in sacred history. We now turn, with the inspired writer, to consider those events which occurred on one of these planets, THE EARTH, which, he observes, was originally *without form, and void*.

The most striking and prominent features of the Mosaic writings, are, the Creation of the World we inhabit, and the destruction of it by a Deluge of water: as both these histories have been attacked by the enemies of Revelation, who well knew the importance of Moses, considered as an historian, in relation to that divine system, we shall not regret our attention to these narrations.

We are under the necessity of supposing, that our readers are informed of the existence, and in some degree, of the application of those instruments to which science is unspeakably beholden: such as the telescope, the microscope, the barometer, the thermometer, &c. not that our reasonings will require any practical acquaintance with these instruments; but that we cannot well avoid appealing to them for the truth of our assertions. Those observations which they have furnished, together with their results, must be taken as truths, admitted truths, because, excursions in demonstration of them would employ these pages in a manner which is not intended.

Moses describes the Chaos as a confusion, without mentioning any agent whereby this confusion was produced; he attributes it neither to fire, nor to water; neither to earthquakes, nor to explosions: he merely acquaints us that the earth existed, but in extreme disorder, the reduction of which to order, is the subject of his history. His arrangement does not lead him to say whether any or what changes were produced in the center of the earth, or in those massive parts of it between the center and the circumference; for any thing which appears in his narration they may retain their former state; but the external parts, the superficial layers of matters which compose the upper strata of our planet, these underwent changes, of which the sacred historian has described the order, and of which he relates the consequences.

The Earth was without form and void: "fightless [unfightly] and unprepared," say the LXX, a chaos, an unarranged mass of materials; confused, disorderly, discordant.

The heathen poets also have described this chaotic state, this primitive character of the earth:

*Ante mare et terras, et quod tegit omnia cælum,
Unus erat toto naturæ vultus in orbe,
Quem dixere Chaos, rudis indigestaque moles,
Nec quicquam nisi pondus iners congestaque eodem,
Non bene junctarum discordia semina rerum.*

OVID Metam. lib. i.

"Before the sea, the land, the all-surrounding heaven were, the whole appearance of nature was the same undistinguished surface, called chaos; a gross unarranged mass, incapable of producing any thing itself, yet containing the seeds of all things, though dispersed."

By reflection on this state of things, we see the reason of the order adopted by Moses. 1. The heavenly bodies were the works of God; therefore, worship should not be paid to them, but to their Creator. 2. The Earth was chaotic: therefore, it had not existed in its present form from all eternity, as some philosophers held; neither, 3. Was the earth itself to be worshipped: that which had been unformed ought not to be deified. The idolatry of the world, at the time when Moses wrote, rendered such a caveat against infidelity and idolatry highly necessary.

The Chaos naturally supposes a mass of materials of different densities; some light, some heavy, some compact, some expanded; solids also, and fluids; all heterogeneously intermingled; materials of various qualities and properties, but all dislocated, all disordered:—Can this incoherent assemblage be fitted for inhabitants?

The prelude to discharging this chaotic state

from the surface of the earth was, giving to the planet a rotatory motion on its axis; and we understand the history of Moses as implying, that some Person of competent dignity, power, intelligence and benevolence, visited this rude mass, took his station opposite to a certain part of it, from thence issued his orders, and directed the whole of obedient nature.

He first bids the globe revolve:—the immediate consequence is, a vehement agitation among the superficial particles of the chaos, resisting the course of the globe; that is to say, by endeavouring to maintain their station, the lighter particles oppose the progress of the revolving matters around them: still, however, the globe continues to roll, and thereby this agitation is prolonged over its whole surface. This account accords with the opinion of those who render the words (רוּחַ אֱלֹהִים, RUACH ALEIM) WIND of God, i. e. a violent wind, so violent as only God could raise and direct. Such is the rendering of the Chaldee paraphrast Onkelos, of the Rabbis Maimonides and Aben Ezra, of the Christian fathers Theodoret and Tertullian, of Episcopius, and others; and it is acknowledged, that the phrase is analogous to expressions used, not infrequently in the Hebrew writings. But the majority of interpreters, with equal propriety and equal correctness, consider these words as denoting a person, the SPIRIT of God, who moved (brooded, say some, as a hen broods over eggs) on the surface of the waters. In either acceptation, however, supposing this Power to be stationary, opposite to one point of the earth, the globe, as it revolves gradually, brings its whole surface, in succession, under the inspection, and influence of his arranging energy, which flowing from this spiritual agent visits the whole progressively.

The natural operation of this agitation among the surface-materials of the chaos would doubtless cause the heavier matters to sink; the metals, the stones, the earths would descend, leaving in the upper regions the lighter particles, airs, vapours, exhalations, and fluids, which being transparent in some degree, though mixed and polluted by various unsettled ingredients, yet would no longer oppose the emanations of light now gliding into them, among them, and through them. Thus God said, *Light be, and light was:* thus God separated the darkness from the light:—1. By the rotatory motion of the earth, one half of its surface only being exposed to the light at one time; the other half remaining in darkness;—2. By causing the opaque bodies to sink below those which were transparent, so that they no longer impeded the passage of light;—3. By establishing the bounds of the horizon, which now represented

presented a state of *night*, in those parts of its surface which declined from the immediate visitation of light; and a state of *morning*, in those parts approaching towards the seat of the direct action of light.

As natural *day* and *night* is now occasioned by the very same motion of our planet, (its revolution on its axis) we may freely infer, that the same cause originally produced the same effect: and since one rotation *now* separates between day and night, between light and darkness, so it did then.

That divine impulse which originally imparted this motion, still continues it, still produces by it the same effects; morning, evening; light, darkness; making *one day*; or, as it is in the Hebrew, "evening, morning, day, one."

But the globe is not a sentient being itself, it can be only a receptacle, a habitation for sentient beings; we, therefore, enquire what principles are necessary to qualify it for the reception of animated existence, to which we must attribute, 1. individual life; 2. the power of continuing that life; 3. the power of transmitting that life in succession.

If the dark and frozen regions of the poles were favourable to life, animal or vegetable, we might dispense perhaps with light and warmth as primary requisites; but, if at this day, Nature exults in the vigour of her productive powers under the genial influence of light and heat, then, no doubt, light and heat were *originally* necessary to the first individuals called into being; and to their continuance after they had received existence.

OF LIGHT, AND ITS EFFECTS.

Light was, as we have seen, the first principle bestowed on this new world, to prepare it for the reception of inhabitants; whether vegetable inhabitants, or animal; and I mean to insist, that the order and progress of each day in the history of the creation, is preparatory to the following days, with a correctness which has hitherto not been sufficiently understood. It will be remembered, that each day is coincident with one revolution of the globe. Light, then, is our first principle preparatory to life:—if we ask, what is the *stimulus* of vegetable life? we must answer *Light*. Do not plants come to perfection without Light? no: Nor display their colours? no: Nor enjoy the functions of their life? no. Do their seeds sprout without Light?—pallid, feeble, enervated, they languish and die. A shrub, enclosed in a dark chamber, bends its *hoping* boughs toward any crevice whereat light attempts to penetrate: to this directs its leaves, to this inclines its stem; and if a leaf *can* reach the cheering beam, that leaf becomes verdant; that leaf may live, while others less fortunate pine, or fall. Change

the situation of this plant, admit the light to others of its branches, they revive under the influence of the genial ray. If light be so necessary to plants, how much more is it necessary to animals? If the life of plants depends on it, how much more the accommodation of animals? The conclusion therefore is, that light is the first requisite to the establishment of a habitation for sentient beings, and with philosophical propriety stands as the production of the first day; the beginning of Creation:—God said, "LIGHT be" and LIGHT was.

SECOND DAY.

THE EXPANSE, OR FIRMAMENT.

A second revolution of the globe, exhibited those beneficial effects that had accompanied the first revolution. The super-incumbent parts of the mass had subsided into somewhat of an orderly distribution, had advanced to a certain degree of clearness, and purification: and now, God directed the *FIRMAMENT* to appear.

The word *Firmament* [רָקִיעַ, ῥακίαυ] signifies an *expanse*; it expresses two ideas: 1. That of an expanded atmosphere surrounding the globe, which we might call for distinction sake, the *blue* firmament; 2. That of a remote expanse wherein the stars are placed. We often speak of "the stars in the firmament;" of "a firmament of stars:" but we ought to remember that in these expressions we describe what is only apparent as if it were real, for the stars are not locally situated in our firmament, *i. e.* the *blue* firmament; they only seem to be so situated, because they *appear* there:—they are separated by an interval of distance—an immeasurable interval of distance!

God spread out this *firmament*, by gradually clarifying the atmosphere; and into this upper region arose the lighter vapours, which floated among their *strata*, elevated above the surface of the earth, in proportion to their natural buoyancy; while the grosser mixtures, and the heavier fluids, sunk by a kind of *precipitation*, to their correspondent *strata* on the earth below.

This seems to be included in the phrase God *divided*, or *separated*, by somewhat of a chemical separation, the lower waters from the upper waters: The word *waters* is taken with great latitude, here implying not *pure* waters (for as yet there existed none to which that character was applicable) but moist, muddy, mixed liquids; liquids of various densities: of these the most ponderous sunk, and adhered to the globe of earth, while the most rare sprang upwards to those levels in the aerial heaven, where they met with a levity suited to their powers of expansion. This process was very much the consequence of that light which had visited the globe on the

first day. The first day had prepared the gross atmosphere, the second day purified and completed it; the first day had determined the heavy materials to their situations on the inert mass, whence resulted compactness, induration, solidity; the second day drained still further the atmosphere of its feculencies, gave its vapours and fluids their due distinctions, enabled them to assume their relative stations, *expanded* the lighter over the heavier, and so spread out the firmament, the expanse, the atmospherical, vaporated, *envelope* of the globe, which on all sides surrounds it, and on all sides is the medium of its embellishment. The work of the second day, says SCHEUZER, may be called the *serenification* of the atmosphere which surrounds the earth.

We have thus advanced also toward a second requisite for the sustenance of life, when lives shall be stationed on the globe; if living creatures are to be sustained by the fluids of the atmosphere, if they are to breathe air, doubtless that air must be fitted for their breathing, it must be cleared from noxious or hazardous ingredients, from pollutions injurious to the vessels which inhale it, from whatever might impede the duties of the parts adapted to employ it, and from all risque which otherwise might attend its operation; in short, it must be pure, not poisonous; and salutary, not deadly.

Air is a fluid, compressible, expansible, elastic; it is the vehicle of other fluids, which according to their nature diminish or increase its activity, and vary its properties by properties of their own. The atmosphere is an expanse of air, into which rise other vapours, where they form meteors; these descend on the earth in the forms of rain, hail, snow; dews, mists, fogs. Clouds are formed in air; and among clouds, thunder; lightening too flashes in air, and *now* air is the great distributor of whatever distant regions afford, to others whose expecting soil awaits till it can receive the beneficial importation.

THIRD DAY.

SEA, EARTH, VEGETATION.

Those flowing liquids which had been purified and liberated from obstructing matters by the operations appointed to the second revolution of the globe, were now enabled to pursue their natural motions, and to combine into considerable collections. God therefore directed those waters, whose weight detained them on the surface of the earth, to congregate in a fit receptacle. These the Sacred historian describes as "*waters under the expanse*;" meaning, all not raised into the atmosphere, all not mingled with atmospherical prin-

ciples, all not exhaled into elevated regions, nor held in solution by the air under the form of vapour.

By this drainage of the waters from the land, the Globe has advanced another step toward being a fit residence for animal life; for how could those living beings have existed in a mixture of mud, which Providence designed to roam the earth? They would want *SOLID earth* for their support and residence; on the other hand, how could those which were appointed to inhabit the waters, live in such a mixture? they would want *water purified*, not combined with earth; but, let this mud be separated into its parts, earth and water, and this single operation furnishes both these descriptions of creatures with accommodation.

We have now acquired the distinctions, and have separated the elements of—Earth, Water, Air, Light. Light, the first great stimulus; Air, the general envelope of the globe; that element most easily affected by light; that in which light produces heat; after air, Water, a fluid possessing many of the properties of air, capable of mingling with air, of rising into the air, transparent like air, and like air expansible in the highest degree: on the other hand, possessing many of the properties of earth, capable of being condensed by pressure, of being consolidated by privation of heat, of being converted into the substance of plants, of animals, of minerals, and even composing the basis of many articles which mankind have agreed to call earths. Lastly, Earth, an indurated, substantial, solid body, compact, dense, and firm, in all its variations of clays, metals, stones, and rocks; its surface varied by undulating valleys and hills, depths and prominencies. Earth, with all its varieties, now meets our observation, and thus the chaotic state of the globe gives place to a state of regularity, order, and arrangement.

VERSES II, 12.

Now let Life start into exercise, but in regular order; first vegetable life, "Let the earth bring forth GRASS," נֶשֶׁת, DESHA, βοτάνη χορτε, *tender* grass, succulent herbage; not the first shoots, but the whole plant, complete, mature, prolific. Vegetation of all kinds: 1. *Grasses*, which clothe the earth with verdure; 2. *Herbs yielding seeds*; shrubs, rising higher than grass; more spreading, more umbrageous; but, perhaps, not permanent; 3. *Trees* of various foliage and figure, lofty, solid, vigorous, perennial.

Among botanic writers *Grasses* are humble plants, feebly supported by jointed stems, and perishing after a single season: *Shrubs* are plants approaching the nature, appearance, and form of trees,

trees, but their stems die down to the earth, according to the seasons; whereas, *Trees* are permanent, and during many a year they equally abide the sultry suns of summer, and the piercing frosts of winter.

The Sacred Writer describes these patriarchal vegetables as "each having his seed in himself;" so that not merely the existence of the individual, but that of posterity, was completely provided for.

The conformation of Vegetables is among the most interesting and instructive enquiries which can engage attention; more especially such parts of their structure as are adapted to the furnishing, the ripening, and the impregnating of their seed. The anatomy of plants discovers one set of vessels for the circulation of air throughout them; another for the transmission of a liquid, which, roused by the genial warmth of spring, rises into exercise, and diffuses its enlivening influence through the whole. The stem, by the roots, draws moisture from the earth, to supply the branches and leaves which it supports. The leaves too imbibe moisture from the air, and exhibit a most curious expansion of nerves, enveloped by the most delicate coatings for their protection. But nothing is more wonderful than the seed vessels, which in a space extremely small, and in some plants scarcely visible, contains millions of future offspring enclosed in each grain of their contents. In short, vegetative life, though it be not of equal powers with animal life, yet in some instances approaches it, and in general holds the place of a medium between minerals, fossils, &c. whose *life* is dubious, if indeed it be life; and animal life, which enables its possessor to exercise those senses and motions by which it is distinguished.

In surveying the productions of the vegetable world we are delighted with their variety, their beauty, and their utility. As they spring out of the earth, and *sport* their green shoots above the surface, they interest us greatly; the beauty of their flowers, their infinitely diversified forms, the elegance of their attitudes, their graceful bendings, or their majestic firmness, attract our attention, and our attention glows into admiration and praise. As means of sustenance vegetables are of the first importance, and from them we derive as well our habitation as our food.

Such are the obvious and evident properties of vegetables; but what shall we say to those numerous species, which go through all the functions of life unseen by us?—those which the microscope discovers?—those which in a few hours burst into life, ripen, perpetuate their successors, and die?—those which grow in the waters? under the waters?—those which inhabit the sultry de-

part? and those which diversify the regions of ice?—which—it greatly surprizes us! are of the same nature and genera. I say, those vegetables, which under the extreme frosts of the polar circle shew the last efforts of vegetative life, are the same as those which the torrid zone of Africa scarcely suffers to exist beneath the burning beams of a vertical sun.

To follow this subject, even moderately, would lead us too far, at present; but I strongly wish to recall to the reader's mind the many various ways by which vegetables furnish and preserve their seed. Usually the flower precedes the seed, and when the flower has done its office the seed is mature. The flower has been taken by botanists as the distinguishing organ of plants, and the different forms in which it appears have contributed to their arrangement and classification. But arrangement and classification are human ideas, ideas resulting from the attainments and *necessities* of science: whether they be *natural* principles is another question. It is known, that some plants have no flowers, yet they bear seed, but bear it on their leaves; others bear their seeds in berries, others in pods, others in nuts, others in stones, enclosed in their fruit: some have many seeds associated, as it were; others have single seeds; some expose their seeds to open day, others ripen them under the earth; some plants render their seeds prolific without the assistance of a partner, others must unite the offices of both sexes, otherwise their productions are barren: in short, in a thousand various manners, and by a thousand different contrivances, they are diverse one from another, yet each has its seed, its own proper kind of seed, in itself. Vide 1 Cor. xv. 37, &c.

FOURTH DAY.

LUMINARIES, HEAT.

Directly after the appearance of vegetation we read of the influences of the celestial luminaries. It is true, that the element LIGHT has already engaged our attention, yet no mention, or hint, has occurred of the element HEAT: heat, however, is necessary to the existence of vegetables, to their maturity, and to their fertility. Now, though it may not be correct to consider the sun as the fountain of heat (or that streams of fire, which are the cause of heat, issue from the sun) yet the sun is the great agent, whose beams call into exercise those principles of heat on our earth, which otherwise would be quiescent and inert. Loosely speaking, then, the sun is the cause of heat; heat is necessary to vegetative life, especially to its maturity, and its succession.

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The periods of vegetation, also, are determined by the celestial luminaries. Plants which are annuals, which yearly shed their leaves, and die in their stems, whether or not they die in their roots, must needs be influenced by the annual effects of the sun. Plants of short duration, which more quickly ripen, and more quickly complete their various stages, are not to be reckoned by the solar revolution, but by the lunar; and these are monthly productions. This statement is in perfect accord with the sentiments of the same inspired writer on another occasion, Deut. xxxiii. 14, and with those words in the passage under consideration, which describe the offices and duties of these luminaries; which are, says he, 1. To divide day from night; 2. To be for signs; 3. For seasons; 4. For days; 5. For years.

1. *To divide day from night*, this is effectually performed by the sun, whose light constitutes day.

2. *To be for Signs* (לַאֲתוֹת, LEATUTH) DISTINGUISHMENTS, *recollections* to bring to remembrance; in short, to form *epochs*; from which to begin reckoning, toward which to direct reckoning, in the course of ages. Accordingly, we find that nations which have not the use of letters (consequently have no registers, yet) observe very accurately the courses and stations of the sun and moon, and are rarely mistaken in their observations on the situations, aspects, &c. of those heavenly bodies.

3. *To be for Seasons* (מוֹעֲדִים, MUODIM) *literally* for APPOINTMENTS; this idea includes in it that of a meeting, a prefixed meeting of two or more persons. I do not well know how the sun could be the *sign* of an appointment for a distant period of time, as a year, or even half a year, since in the course of so many days an appointment might be forgot, or vacated, by sundry interventions, or not distinguished from days before or after; yet it might serve as a sign for one day; a meeting when the sun rises—when the sun declines—when the sun is *at its height*—would be clearly understood and remembered; and so we find it employed in later ages: “by the time the sun be hot ye shall have help,” 1 Sam. i. 9; vide also Judg. ix. 33; Lev. xxii. 27; Josh. viii. 23; Neh. vii. 3. The moon, however, being of shorter course than the sun, and,

“nightly varying in her circling orb,”

affords a much more effectual mean of fixing appointments; and this probably, was a part of her duty, and among the earliest uses actually made of her light, and her course.

In hot countries the heat of the day is a time for rest, not for exercise; appointments, therefore

would be made for a time when the sun declined, for the cool of the evening, *the breeze of the day*, as the Hebrew speaks; but if appointments referred to a day more distant than that now current, the moon would mark the arrival of the period of time prefixed. This luminary, then, answered the purpose of some great clock, which being universally seen, and understood, conveyed intelligence of the proper hour, to every one who exercised a due attention, wherever stationed on the face of the whole earth. This is the use now made of the aspects of the satellites of Jupiter; those telescope-planets, for, when our ships have reached the uttermost parts of the globe, yet they always know the time at London, by inspection of those luminaries. It was, however, as it still is, much more natural for man to direct his eyes toward his own moon, which needed no telescope to render her visible, but, at once reported by her aspect the time or season of public appointments.

In mentioning public appointments, I allude principally to the seventh day, which was ordained as a time of sacred commemoration; for, observe how perfectly the moon is adapted to this service; when her slender crescent just gilds the close of evening with its mild lustre, her figure is totally unlike what it is seven days afterwards, when light and shade divide her between them; or, when after another seven days she rises in full splendour, her whole surface, radiant with reflected light, and floods of glory burst on all the skies. The effect of the next seven days is striking, light and darkness have changed their quarters; what had been light, to the right-hand, is now dark; what had been dark, to the left hand, is now light; so that, at these four periods of the lunar revolution, the time of appointment indicated by her form could not be mistaken.

It is impossible to deny, and to support the denial by convincing arguments, that these peculiarities of the moon's appearance were coincident with the appointment of Divine worship among mankind. If a private person, or a private family, might offer adoration to the Great Author of all every evening, as day declined, yet that more numerous assemblies should unite in public devotions every seventh day, wherever were inhabitants capable of public devotion, seems to be an irrefragable inference from those marks of time, which the moon exhibits to every eye. Surely in these respects she was *appointed*—divinely appointed—for sacred seasons.

4. *For DAYS* (יָמִים, IAMIM); this word, in the plural form, seems to mean somewhat more than merely a natural day; it expresses a peculiar, fixed,

times meaning a year, as some think, so Gen. xxiv. 55. "Let the damsel abide with us *days*, i. e. a full period of days, or ten"—*months* say some—ten *days*, say our translators. I suspect it means a MONTH, or at least a period of days determinable by the moon, at shortest perhaps a fortnight. Lev. xxv. 29: "If a man sell a house, he may redeem it, within *days*—a period of time—a year, a full year," say our translators; whether this also should be a month I do not now enquire, but I think, on the whole, it should be distinguished from a year, as in the following verse: "And if it be not redeemed until the fulfilment of a whole year;" i. e. at the utmost, at farthest. Perhaps the word *period* (or *season*) expresses as much as this phrase does in Hebrew. So Exod. xiii. 10. "Thou shalt keep this ordinance from year to year," from period to period: here it clearly refers to an appointed time for a religious service, and so it does, Gen. iv. 3. "And it was at the end of *days*—(process of time, *Eng. Tr.*)—Cain brought his offering to the Lord:" This agrees perfectly with the Indian histories, which say, that Abel was slain by his brother at a general family sacrifice: and as it was customary for the ancients to offer social sacrifices after gathering their fruits, I take this sacrifice to have been of that kind; but whether it referred to an annual harvest, to a half-yearly harvest, or to a monthly harvest, is not easily decided.

Our inference, however, remains undeniable, that *days* in the passage before us does not relate to the natural day, but to a period of time of some length; yet not so long as a year, as is fairly inferred from *that* being the period of time mentioned in the following verse,

5. *And for Years*: These heavenly bodies are still used in calculating years; we have therefore no occasion to prove this to have been part of their original appointment.

A remark or two, of some consequence, arises from the foregoing statement. 1. That these periods of time were connected with, and either did regulate, or were regulated by, services of a religious nature: they were therefore common to all mankind; known by all mankind; the concern of the whole human race. 2. That the Antediluvians had a more complete manner of calculating time than some have been willing to allow them; they had days, weeks, half years, (or *seasons*)' years; those, who have taken the antediluvian years for months, in order to reduce the length of life in that early age of the world, have overlooked this decisive instance of the rudiments of chronology which they possessed. 3. If these heavenly

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bodies were appointed *officially* to remind mankind of the return of religious opportunities, what shall we say to those who neither heed these monitors, nor any others, but who "refrain their feet from the house of God," and forget his worship, in spite of the united voices of wisdom, of revelation, and of nature!

FIFTH DAY. VERSES 20, 21.

ANIMAL LIFE.

When the Earth was prepared to receive and support vegetation, vegetation was commissioned to cover and adorn the Earth; but vegetation itself is preparatory to the reception, and support of new classes of beings, which though they do not derive existence from it, yet are to reside among, and to feed on its productions, plants, herbs, and fruit. The divine command is, "let the waters produce (*צֶרֶפֶת*, *SHERETJ*) creeping things.—Insects, say some, and very properly; but not insects exclusively. It is certain that insects of many thousands of kinds breed in the waters, and after a proper time spent in them, they become inhabitants of the air; but so do frogs, eels, and many other creatures, which we cannot properly include among insects. In fact, I presume this word includes whatever kind of creature is not properly ranged in the superior classes of animal life; say tortoises, frogs, snails, slugs, &c. worms of a thousand sorts; insects, as gnats, beetles, locusts, ants; and those ten thousands of minute *animalculæ*, which animate the pool; but whose names would convey no intelligible idea to the reader.

It still continues to be the property of the waters to swarm with life, to bring forth *animalculæ*, whose minuteness and whose structure perplex us. It is worth our reflecting on the infinite variety of insects, on their wonderful changes and transformations, and their instinctive foresight. Nor should we forget, that the microscope discovers in water, insects so small that thirty thousand of them may inhabit a single drop of that fluid; yet has each one of these its muscles, nerves, veins, arteries, stomach, bowels, blood, and animal spirits, or something equivalent; and if they also breed by laying eggs, what shall we say to the minute dimensions of their parts, and of those agents which perform these important functions?

Let us descend—no, it is not *descending*—let us rise to a conception of creatures of those ranks, then to insects, &c. whose dimensions render them more visible; let us think of their structure, and of their various modes of life; for some expend their whole existence on a single leaf, while others

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others fly abroad at pleasure; some multiply by self-division; some bear their posterity growing from them as branches from trees; nay, these very branches shall have young shoots, as it were, budding on them, and shall be parents even before they quit their parental stock; three generations growing at once! What shall we say to those which are multiplied by being cut to pieces, every piece of which, however minutely divided, acquires the parts necessary to life and activity, and with them vitality and animation.

I could wish to impress this on the reader:—Imagine a single creature divided into ten parts, by what power does each part acquire suitable members? was it originally the head? how does it acquire a body, legs, bowels? was it the body? how does it acquire a hand, legs, members? Moreover, take one of these creatures—turn it inside out—it shall, nevertheless, after a time, replace its parts in proper order, and resume the proper functions of each. Nor are these the only classes of creatures which are offered to our wondering eyes; the bodies of some are soft (as worms) yet their productions after a time become hard as rocks; others inhabit cavities without any visible way of entrance. After years of apparent death some are found endued with life, and their vivacity returns after a suspension of twenty years! Some we suffer to die, and we restore their lives under our own eyes! In short, the mere enumeration of their wonders would lead us beyond due limits.

But like the Vegetables, these Insects also have their seed in themselves; and extremely worthy of remark, are the various attentions they pay to the sustenance and welfare of their future progeny. With what solicitude they chuse the right species of leaves, on which to deposit their eggs! with what care they glue those eggs to the proper surface of the leaf, to guard them against dangers from the violence of the wind; from rain, frost, and snow! how artfully they roll up the leaf for this purpose; or chuse those branches of trees in the crevices of which they may deposit their important burthen! Some enter the cups of flowers, others enter seeds, or fruits, or roots, or woods; flesh also in its various states of freshness or putridity; nay, even while living. Many are those animals which receive the deposited future progeny of insects, and furnish that nest which is to be the mean of their opening into life. In these instances, and in how many others, what wonders rise to the view of intelligent observation!

From insects we are led to Birds. Their creation is referred to the same day; and the transition

is in correct order, for insects have wings like birds, like birds they are oviparous, and like birds, they are of land, water, and air. There is in a feather, that most admirable structure which would justify our closest examination of it. The beauty and the fitness of its parts are surprising; and the internal conformation of it, no less than the external, is wonderfully adapted to its purposes. But we must not enlarge on what comes under daily notice.

VERSE 21.

God created great WHALES. Heb. Taninim: for what these *Taninim* might be, vide the plate, &c. on Lam. iv. 3. No doubt, but the epithet *great* describes a class of sea animals of the most considerable magnitude; whatever, therefore, is known as a water animal, immense or unweildy, is included in it. At the same time *every living creature that moveth* in the waters, *i. e.* in the sea, received its being. How innumerable these are, needs no demonstration; we are aware, that the most indefatigable naturalist never has seen, much less observed, any considerable portion of these;—for indeed their situation in the great deep ever has prevented, and ever will prevent, any adequate knowledge of their numbers, their structures, or their manners.

God created the Fishes; they were not productions of the water itself, that element only furnished a place for their residence. Consider on one hand the nature and simplicity of the element water; on the other hand, the admirable structure of fishes, diversified into so many forms and manners. Some have their teeth in the jaws, others in the throat, others in the stomach; some have a single row of teeth, others have many rows. Consider the structure of their eyes, of their fins, which answer the purposes of legs, or like oars impell them with incredible swiftness; of their tail, which serves them as a rudder; of their exterior covering, scales, for instance, which differ prodigiously from the feathers of birds: consider the provision made for their breathing beneath the watery element, the air-bladder, the gills; nor omit the parts necessary to digestion, the stomach, the intestines, &c. &c. Consider the structure and organization of their bones; some have them internally, and of these some are solid masses, strength itself! others are pliant cartilages; the bones of others are on the outside of the creature, in the form of shells; shells also are the habitation of many kinds, wherein they constantly reside; these “grow with their growth, and strengthen with their
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their strength," and by means of a hinge of curious construction, are opened or closed by the inhabitant at his pleasure.

The *creeping things* in the sea, are innumerable, and form many classes, as worms, polypi, &c. some are crustaceous, as lobsters, crabs, shrimps, &c. others leather-coated as the star-fish, the cuttle, &c. some are soft, others hairy, others slimy.

Fishes are extremely active, and even indefatigable; they are voracious, and destructive; whatever may be said in doubt whether beasts were carnivorous in their primitive state, fishes seem to have devoured one another from the very beginning; and were it not for the wonderfully prolific powers with which they are endued, one might almost suppose some of the weaker species must ere now have been extinct: but, when we read of millions, many millions, of eggs contained in the roe of a single fish, we are led to infer, and to admire, the wonderful provision of Providence for the maintenance of every species, notwithstanding the depredators that annually thin their numbers without mercy. Fishes then, also have their seed within themselves, and this receives life after a thousand different chances, and amid a thousand different dangers.

SIXTH DAY. VERSE 24, *ad fin.*

TERRESTRIAL ANIMALS.

The air was ready for the reception of inhabitants before the waters, and the waters before the earth; we have seen insects and birds fly in the air, and fishes swim the seas; it remains that the solid earth should be peopled also, and then the whole habitable globe is occupied. This is the work of the sixth day.

The legs and wings of birds, the fins of fishes bore some resemblance to the legs of quadrupeds, as instruments of motion; and their organs of digestion were not unlike those which were requisite to enable animals to receive food, and to convert it into nutriment. We perceive, then, that the same principles of formation as those already in exercise, but varied to suit the element wherein they were to act, would accommodate a new race of creatures, of habits and manners different from those of the former. They were not, it is true, intended to fly in the air, but they were to breathe this element as a condition of life; they were not to swim like fishes, but to walk, to run, to climb, to migrate, and to seek their food by various means, whether of force or fraud; whether from the vegetable productions of nature, or from those of a more elevated rank. The same intentions but under another form, the same ideas but varied, perhaps heightened, in their powers, or exalted in

their application, were directed to the formation of animals in their various genera and species and at last Man himself.

Animals are divided by the sacred writer into, 1. (בְּהֵמָה, *BEHEMAH*) Great Beasts, or cattle, animals capable of domesticity; say, horses, cows, &c. not excluding the elephant; 2. (רֶמֶשׂ, *REMESH*) *creepers*, animals of a smaller kind, say, such as weasels, ferrets, hedge-hogs, &c. add to these, the hare, the rabbit, the rat; and why not worms, serpents, snails, and slugs? all of which *creep* on the earth; 3. (חַיָּה, *CHIAH*) wild animals, literally, *livelies*, those of a savage nature, which obtain their living by prey, or other acts of rapidity and exertion. Lions and tigers, perhaps, and carnivorous animals in general.

We shall not stay to examine the peculiar natures of these, but shall proceed at once to introduce the chief of all;—Man: man who is raised above the creatures, not so much by the form or figure of his person, as by the qualities of his mind; not by the more exquisite construction of his members, by their actions, or by their powers, as by his enlarged understanding, his mental capacity, his reason, his soul, his intelligence. We have seen the world prepared for his reception, the elements called into activity, and various distributions of life among animals; all prior to the appearance of him who was to reside among them, and to rule over them, the vicegerent of Deity itself.

Man is allied by the structure of his body to the animals; his arms, his legs, differ not much from those of some among them: they too possess the senses of seeing, of hearing, of smelling, of tasting; they too move, walk, run, leap; their life like his depends on the blood which circulates in their veins, on the air which plays in their lungs; they too have nerves, and those nerves are the instruments of sensation, like the human. But *SPEECH* is appropriate to mankind; it was evidently fit that a tribute of intelligible praise should be paid to the great Author of all; and this was the office appointed to Man. "For we also are his offspring," is a noble sentiment of the poet *Aratus*, quoted by St. Paul, Acts xviii. 28. and it has been thought by many, that a proportion of wisdom superior to what had been employed on the creatures, was exercised when Man was about to be formed. Certainly, as Man only was made "in the image of God," invested with dominion, capable of knowing God in his ways, of admiring him in his works, of expressing his admiration to excite the same sentiment in others, and of directing ascriptions of praise to his almighty Author, he was distinguished by faculties the most important in their nature, and by abilities which, wisely improved,

must have perpetuated his happiness, and probably have augmented it.

But our present concern is with Man according to his station among the works of nature; for though the moral history of this "Son of God," is what forms the chief subject of the Bible, yet we are not at present sustaining the character of theologists but naturalists.

Man was created male and female; the male first, before whom, as an exercise of his understanding, God caused the creatures to pass, as it were in review; by this he became acquainted with his own vocal powers, and by this he improved them; he acquired fresh abilities by practice; he imitated the sounds of these animals; he challenged them by sounds of his own; but no one answered, no rationality beamed out from among them: not one of them asked him a question; not one of them made him a reply: they held no conference with him: they replied to the voices of their mates in accents of affection, but affection for Adam they had none, obedient though they were to his commands. The Lord God said, "it is not good for Man to be alone;" Adam also, "found no comfort for himself;" but Divine Omnipotence easily accomplished what Divine Omniscience knew would be proper; and from a part of Adam himself, God formed a sex to be his companion. We do not see such modes of generation now in larger animals; but we see smaller creatures divide themselves into two; and each part instantly completed into life, instantly perfect. Since the distinction of great and small cannot possibly be any obstacle to Divinity, what forbids us from comparing, by way of illustration, the generation by division of Adam, to those generations by division, of which we may if we please have daily examples before our eyes. The fact I myself have seen.

We proceed now to consider the residence provided for this lovely pair, this origin of mankind.

VERSES 5, 6.

"The Lord God had not caused it to rain on the earth [הָאָרֶץ, HEARETJ] in general, and man [אָדָם, ADAM] was not, till the whole [אֲדָמָה, ADAMAH] cultivable ground: but a copious stream [נָחַל, NACHAL] rose out of the earth [הָאָרֶץ, HEARETJ] and watered the whole surface of [הָאֲדָמָה, HE ADAMAH] the cultivable ground." This opens a sense very different from the import of our translation, which renders "a mist." It is, however, perfectly agreeable to what the tenth verse offers, when correctly understood; that is, indeed, I presume, a more particular repetition of the same information. But, as this version is so different from what has been customary, to justify it, observe,

1. That the LXX render πηγὴ δε, and Jerom also renders *fons*, a fountain; so that the notion is not new, though perhaps the application is: the same say Aquila and the Syriac. 2. The word AD, or AID, does not usually signify "mist," but rather a sudden *bursting forth*, like a watery storm from a cloud; and metaphorically, an *overwhelming* occurrence. Dr. GEDDES, quoting *Theodoret* and *Oleaster*, would refer this copious stream of water to the Chaotic flood, before it was drained to its proper receptacle; but, 1. I do not see how that flood could be said to *rise from* the earth, it rather I suppose, *descended* on it; nor, 2. How it could be said to water the cultivable part of the earth, which is what the writer clearly has in view, because he says immediately before, that Man (or ADAM) *was not yet formed, or commissioned to cultivate it.*

OF PARADISE.

We have considered the earth as revolving on its axis, and thereby bringing every part of its surface in succession before the station of Creative Power; hence it will follow, that each climate of the globe received a distribution of plants and animals proper to it; and that the whole was replenished with life in various forms. But the general surface of the earth was perhaps, not equally pleasant throughout, if indeed it was equally filled or finished; for, what reason can be given why some parts should not hereafter acquire productions which they did not at first possess? This happens daily from various causes. Nevertheless, there was one particular spot, where Divine Goodness embellished the territory with superior attention; where the grateful alternation of hill and dale, of land and water, the peculiar salubrity of the atmosphere, and the temperature of the climate—with numerous other felicities, united to render it a fit residence for the noblest work of God.

There are two questions on this subject: 1. The properties of the place; 2. Its situation. This last enquiry has exercised the pens of several learned writers; but, the consideration of one question may lead us to understand, at least, if not to determine the other.

Without affirming that the earth had, or had not originally, as it has now, its torrid zone and its frozen zone, we may safely suppose, that Paradise was in a *temperate* region; it was therefore either in a temperate zone, or on a mountain, or hill, in or near the torrid zone; for it is to be observed, that the tops of the mountains, even in Africa, are covered with snow; and the water on them is frozen into ice, while the most sultry heat rages in the plains at their feet. It will follow, that there *was*, as there actually is, as great

great a choice of temperature among a range of hills, as in the distances (of latitude) from the equator to the pole. Paradise therefore was in a hilly country.

2. The variety of temperature enabled the various tribes of animals to enjoy themselves, though calculated for different climates; those which delight in heat might bask in the most sultry beams of noon; those of cooler constitutions might find nearer the hill top less ardour, and freer breathing; those plants too which shoot into luxuriance by means of water excited to activity by heat, might display their amplest foliage below; while those to which a milder air is more invigorating might vegetate with undiminished luxuriance above. In short, by means of the various elevations a hill (or hills) affords, every animal and every plant of every clime might be associated, in one most brilliant harmony, no less of temper than of colours.

We are told also "that a river went out of Eden to water the garden; from thence it was parted, and became into four heads." Perhaps this would be better rendered, *and a stream rose—gushed up—in Eden, to water the garden—where it formed a lake—and from that place it was divided, and existed in four heads; i. e. heads of rivers.* Now where do we look for heads of rivers? Where do rivers take their rise, but in elevated situations? The high mountains of Switzerland furnish the Rhone, the Rhine, the Danube; those of England furnish the Thames and the Severn; and so of other countries. The hills furnish the sources of streams. All these marks agree with a hilly country, no less than with the effect and inference of correct reasoning. We therefore infer that Paradise was a garden, comprising a considerable extent of country—part of it consisting of hills, whose summits afforded extended prospects, which on all sides delighted the eye, while they afforded choice of shelter, and of temperature for plants, for animals, and for Man. This scene was still further diversified, by an extensive sheet of water: of its inhabitants, and thereby of their fellows in other waters, Man by this mean acquired a knowledge; and so abundant was this water, that it supplied four streams, from the lake which it formed; and these pursued their courses toward other parts of the earth. The Geographical situation of this Garden, as known by local dissections after the Deluge, is treated of among the separate disquisitions.

We have now terminated our sketch of the progress and order of Creation, in which we have been particularly desirous of shewing the propriety of that succession of events which the sacred writer narrates. To confirm this statement, let us for a moment reverse the order; had the animals been created before vegetables, on what

could they feed? What preparation existed for the support of that life which they had just received? Must they resign it instantly, instantly return to that nothing out of which they are so recently commanded? Or, had vegetables been created before the elements were purified?—from whence could they receive the *stimulus* necessary to perfect, and to support them? Earth forms but a small part of the substance and structure of a vegetable: Light forms much, Air forms much more, Water most of all: shall a vegetable then for want of water, air, and light, return infructuous to that chaos which had but lately suffered its production? And how could the very elements themselves subsist, to any beneficial purpose, till they had been separated, arranged, purified, and, as it were, *sublimed* into activity, by the concentration of their powers, and the mutual attraction of their particles? Moreover, how could the elements be purified, except by a rotatory motion of the globe? What way so fit, what way so adequate and compendious? This train of reasoning answers a question which has been asked, why God employed six whole days in the work of Creation?—Because the order of things required a revolution of the globe to each portion of the Creation, as it proceeded; and each revolution of the globe produced, of course, night and day. But if it be demanded, whether these revolutions were absolutely of the same length as the present revolutions of the globe?—We must reply, we do not know; if they were only half so long, or a quarter so long, they would answer the purposes of revolutions: but what becomes of the question on the length of time employed in creation? For aught we can prove, the six revolutions of the globe were completed in six hours:—but suppose they were ten times as long as they are now, it is just as reasonable to enquire, wherefore God does not command all generations of creatures to appear on the earth, at the same time, as to enquire wherefore he thought proper to establish some kinds of plants, &c. in maturity before he produced others.

The power of imagination, as well as of belief, refuses to admit the idea of a settled, considerate, well-informed *atheist*: whoever will *now*, examine the works of creation,—*now*, when the regularity of their motions is confirmed into fixed laws, and established with such precision as to justify our calling it the course of Nature, such an one will find it extremely difficult to *convince* himself, whatever he wishes, that the operations of Nature are not directed by a superior agent: but, whoever will suppose himself to have been a spectator before this course begun, at a period when the vast mass was dead, inert, confused, will find the contrast overpower his mind, and vanquish

quish his objections at a stroke. HE only who could circulate the planets round the Sun could revolve this earth on its axis, could separate its confusion, could arrange its divisions, could ornament its surface, and could people it with inhabitants: HE MUST BE GOD; must be the proper object of worship; and this seems to be the very conclusion that the sacred writer designed should be drawn by his readers, when he begins by observing, that, "in the beginning God created the heaven and the earth."

But did not God create other worlds? other systems of worlds? Yes, surely; "He made the stars also," says Moses.—The same power who formed and decorated the earth formed and endowed those brilliant orbs of light; but I have no commission to write *their* history; *that* may occupy some one among themselves; it is not my office, neither indeed does it concern my reader or myself." Let us not think that all the works of God terminate on ourselves: we behold them, we admire them, but they are neither our property nor our subjects:—instead of embarrassing ourselves on questions relating to them, let us take care that *this* be not that spot of the divine dominions from whence a revenue of praise is expected—but refused; a world distinguished by bounty, and ornamented with every Divine munificence, but marked by withholding those acknowledgments that are due from the rational spirit to its Divine original; from the creature to the Creator; from man to GOD: forbid it conscience, forbid it gratitude, forbid it Heaven!

CHAPTER II. VERSE 12.

THE GOLD of that country is good: *i. e.* Gold in its natural state, before it has passed the fire; of great purity, whether found in masses of greater or lesser magnitude, or in grains mingled with the sands of rivers, gold-dust: which is possibly here intended.

BDELLIUM, or **BEDOLACH**, (בדלח). Many suppose that this is a mineral production: the LXX. translate ἀνθρακας, a carbuncle. The Rabbins are followed by *Reland* in calling it *chrystal*, which is countenanced by the LXX. who render κρυσταλλον, Numb. xi. 7. *Solinus*, cap. 15, says, that chrystal is found in Scythia, "and although it is also found in much of Europe, and in some places of Asia, nevertheless that which comes from Scythia is the most valuable." *Dionysius Periegetes*, also, verse 181 says, that on the banks of the river Thermodon is cut the chrystal, as pure and as clear as ice. But some instead of *Bedolach* read *Berolach* (ברלח) and these render "the *Beril*," which, say they, is the prime kind of chrystal.

The very learned *Bochart, Hieroz*, p. II. lib. v. cap. 5, seeks the *Bedolach* among living animals; according to him it is the pearl in its shell. This he illustrates by the comparison of the manna to the *Bedolach*, Num. xi. 7; *i. e.* to its white colour, and to its round figure; and he supports his opinion by the signification of the root בדל badal, to separate, to set apart, as if the *Bedolach* was the chief of pearls, like what *Pliny* calls a *Union*; lib. ix. cap. 35, *which name is given particularly to pearls of the largest kind*. Others think the gum of a tree is meant by this word; as may be seen in **CALMET**, article **BDELLIUM**.

But I would remark, that the Hebrew has another word for pearls, *peninim*; and if pearls were really intended here, why not call them by their proper name? May the *Bedolach* be that clear, refractive, natural production called "mother of pearl" by our jewellers, &c. That substance may fairly be taken as an object of comparison in respect of the brilliant hues, the fugitive, delicate and vivid, flashes of colour which it exhibits as viewed in different lights. From the comparison of a tender pellucid grain, the manna, to this *Bedolach*, I conclude that both possessed the principles of refraction in a very observable degree. (Vide **FRAGMENT TO CALMET**, No. clii. p. 122.) *Dr. Geddes* has produced a passage from *Benjamin of Tudela*, for the purpose of proving that the *Bedolach* is the pearl; but I think it favours quite as strongly, what I have hinted at, *viz* the mother of pearl. The *Rabbi's* words are (שם מצא הבדולח), *the place of finding Bedolach*.—"In the month of March," says he, "the drops of rain-water which fall on the surface of the sea, are swallowed by the mothers of pearl, and carried to the bottom of the sea; where, being fished for, and opened in September, they are found to contain pearls."—"It is remarkable," says *Dr. Geddes*, "that the author uses both the Hebrew name *bedolah*, and the Arabic *lulu*, one at the beginning of his narration, and the other at the end of it." But, observe, 1. This story of the formation of pearls is false; 2. The narrative is confused, and it is not extremely clear that the same substance is called both *bedolach* and *lulu*. The place was *El-katiph*, a town on the Persian gulph. Now, the different ideas of *chrystal*, which is transparent, of a relation to pearls, or connected with pearls, and of refractive tints of colour, all unite in the mother of pearl; which therefore seems to have several *plausibilities* in its favour, as being the *Bedolach*. But the evidence is not sufficiently strong to exclude some precious stone, or gem, which also may possess these properties. Vide the illustration of the **MAP OF PARADISE**.

The

The ONYX-STONE (ֹשֶׁה, SHOHAM). This stone ornamented the pectoral of Aaron, Exod. xxviii. 20. xxxix. 6. *Aquila*, *Symmachus*, *Theodotian*, and others, render *Onyx*; the LXX, *Σμαραγδος* emerald; or *λίθος πρασινος*, a green-leek-coloured stone: a name given to emeralds of the most valuable kind; such as are, particularly, those of Scythia. *Pliny* says, lib. xxxvii. cap. 5. "The most valuable (emeralds) are Scythian, so named from the country which yields them; they are more highly coloured than any others, and are without defect; so that these emeralds are as much superior to others, as others are to ordinary gems." *Comp. Solinus*, cap. 15. After all, is this *Shoham* of the text the *lapis lazuli*, or stone with gold veins, which yields the ultramarine blue?

VERSE 21.

SLEEP of Adam. This is expressed in the Hebrew by a peculiar word (תַּרְדֵּמָה, TARDĒMAH) rendered by the LXX. *extacy*. It was not ordinary sleep, neither was it a lethargy. It seems to have been a kind of prophetic rapture; a state much like that of St. Paul, "whether in the body, or out of the body, I cannot tell;" and thus it is said of Abraham, Gen. xv. 12. a *tardemah*, a state of suspension, or rather an absorbed state of the bodily faculties fell on him, to qualify him for receiving a prophetic vision. The same may be understood of Daniel, chap. viii. 18, "I was in a deep sleep (*nardemah*, Chaldee) but the angel raised me" to enjoy a prophetic vision; we may therefore presume that Adam beheld in vision the creation of Eve, and when he awoke he found his new companion a reality, and his vision changed into possession.

The RIB parted from Adam does not signify a single rib, but a series or system of lateral construction. Probably a considerable portion of Adam's side was separated, and formed into a companion for him, "bone of his bone, and flesh of his flesh." By being formed from Adam, Eve partook of that quickening spirit which God had previously breathed into Adam; no separate quality, no particle of the divine spirit different or distinct from that of the first man was imparted to Eve. As a child now, when parted from its mother, partakes of her life, so did Eve of the life of Adam. We know that a small space contains the future infant in its primary state, yet a child just born is perfect in its parts; so probably, Eve possessed a relative perfection when divided from Adam, but was suddenly matured to full vigour and beauty by her divine Maker. There is no greater difficulty in supposing that a portion of Adam was quickened into life, than there is in supposing that a portion of a mother is quickened into life. If curiosity demand how this is done? we must answer we cannot

tell; yet every day demonstrates the fact. Moreover, if Eve had received a distinct and separate *rational* spirit from her Maker, she would have been independent of Adam, and, in fact, allied to him no further than by borrowing from him a few particles of animated dust. There being no *rationality* in brutes, it signified nothing how many distinct individuals, or even distinct pairs of them were created, since no importance attached to their descent; but it was not so in relation to man, since his nature was endowed with a something not imparted to brutes.

TREE OF LIFE.

This Tree appears to have been the counterpart to the "Tree of appropriation of good or evil," and to have contained in it those salutary properties capable of mingling with the circulating fluids of the human frame, and of renovating their vigour inconceivably beyond what our usual food does at present. We know that food revives and invigorates the weary and exhausted; so I apprehend, when the human frame had through length of time, found its active powers diminished, the Tree of Life would have supplied, as it were, fresh oil to its mechanism, and fresh activity to its impulsive agents. Why was not the fruit of this tree partaken of by man?—because man had not yet experienced infirmity, fatigue, or weakness; why should he seek a remedy, who was totally ignorant of disease? And if indeed Adam had partaken of that fruit, the effect of every participation would, no doubt, have worn off in time, so that it would have terminated as to any sensible benefit, and would have required repeated, perhaps even constant renewals. In short, as at present, poison once received has fatal effects on the human body, yet the effects of food though nutritive, are not permanent but require repetition, so I apprehend the Tree of Knowledge was poisonous, though its fruit were received but once, while the Tree of Life would have been salutary, only in consequence of repeated receptions of its balsamic and renovating virtues. N. B. We are not obliged to take the words "live for ever" in the instance of man, as implying an absolute *eternity*; but a very long space of time, a perpetuity: why may we not suppose, that after a due course of ages of obedience, the human spirit of Adam would have been translated to a superior world, a world of spirits, as its reward?

Observe, The Tree of Life was distinguished,
1. By its place—in the middle of the garden;
2. It was not prohibited, as the Tree of Knowledge was. We may gather the properties attributed to this tree from the Revelations, chap. ii. 7. It stood in the midst of the Paradise of God: chap.

xxii. 2. 2. It bare ripe fruit monthly ; the leaves of the tree (and fruit also, no doubt) were for healing—restoring health—to the nations. Now, since at this day health is maintained, or disturbed, by suitable or unsuitable food, why might not the same occur in Paradise ? Consider the distinctions of meats established in all nations ; especially the abstinence of the Bramins, and others professing sanctity among the most ancient nations, and in the remotest times.

Did the Divine *Shekinah* appear at this tree in the midst of the garden, as its peculiar station ?

VERSES 16, 17.

TREE of knowledge of good and evil. Understand, not a tree capable of imparting knowledge, but rather the tree of discrimination of good and evil ; the tree appointed to determine whether man would by his choice, by obedience or disobedience, appropriate good or evil. Speaking as naturalists, and under that character, only, we might say, that probably this plant had some injurious, perhaps inflammatory principle in it ; some poisonous quality, whereby it was rendered utterly unfit for human food, being inimical to the human constitution. This was a natural reason why it was forbid : a natural reason why death attended the partaking of it, yet it might not be immediately fatal to all creatures which partook of it ; hence Eve might think it safe for herself, as it appeared to be for them. This notion may be illustrated by reference to the Manchineel-apple tree of the West-Indies, under which if a traveller reposes, he suffers for his want of caution ; if it rains while he stands under it, and the drops fall on his flesh, they raise blisters ; if he touches any of the sap of the branches, or the juice of the leaves, it poisons the parts which receive it ; if he eats of the apples he dies ; yet parrots eat of them and do not die : but their flesh acquires the propriety of rendering those who inadvertently feed on it very sick.

Observe, this Tree was distinguished, 1. By special information as to its deleterious qualities, so that perhaps Eve was right when she said, “neither may we touch it ; 2. By its place and situation in the garden ; 3. By the partial truth, but not the whole truth, which the Tempter represented to Eve, ye shall not surely—not immediately die—but ye shall be as DIGNITARIES (אֱלֹהִים) appropriating good or evil : free to choose ; matters of your own actions ; uncontrolled, uncontrollable ; superior in every sense of the word ; ABOVE the law.

As God has permitted many poisonous plants of various degrees of venom to grow on the earth in its present state, so we may suppose that he admitted one into Paradise itself, where among all

varieties of trees nutritive and exquisite grew this distinguished vegetable, which stood as a test of obedience ; safe while not touched, incapable of doing any injury while refrained from ; only, and certainly, fatal, when received as a viand, mixed with the fluids of the body, and incorporated with the person. Such was

— that forbidden fruit, whose mortal taste,
Brought death into the world and all our woe !

Such was that delusive envenomed vegetable, the

— fallax herba veneni,

as Virgil terms it, which polluted the blood of our first parents, made a breach in their integrity, both of body and mind, and introduced a thousand diseases, which the pure fluids of Adam or of his wife, were incapable of generating.

As to what description of plant this Tree might be, Scripture is silent ; we must be silent too. We may fancy if we please, that it might be a fig-tree, or an apple-tree, or a vine—or any thing else—but fancy is not in this instance like some arithmetical rules, wherein by means of falsehood we approximate truth ; in this enquiry all hope of ascertaining TRUTH is absolutely lost.

CHAPTER III. VERSE I.

NOW the Serpent (נָחָשׁ, NACHASH) was—It is extremely difficult when treating on subjects of which the mind has formed preconceptions, to suppress the action of those preconceptions, and to exercise ourselves simply in search of truth ; of this the Serpent, who bears a conspicuous part in the fall of Man, is a notorious instance. Philo pretended that this history was an allegory, consequently that the Serpent was allegorical also ; the symbol of voluptuousness, of the desire of illicit pleasure ; this seems to be one extreme, to avoid which, others consider this Serpent as simply a natural reptile, possessing speech and cunning, walking upright on feet, and by its superior endowments misleading our first parents. This is certainly to place him above the level of the brute creation. The famous Rabbi Abarbanel supposes that he was a natural serpent, but that he deluded Eve rather by his actions than by his words ; that by creeping up and down this tree, and eating of its fruit, he convinced her of its entire harmlessness, so that the transgression of eating the fruit resulted from the motion of criminal desire in Eve. Bekker thought the natural serpent was not intended, by that the devil was the tempter, and was only metaphorically a serpent. This notion is not at present popular ; but it is not therefore impossible that if properly understood and explained it might deserve attention.

Eochart supposes that the devil had communicated

cated to the serpent something supernatural, as also afterwards to the ass of Balaam. But this opinion is liable to the objection that it attributes to an evil spirit, and for evil purposes, a power which belongs only to God; since it alters the very nature of the subject which suffers it. Most interpreters unite the agency of Satan with that of the serpent; but when they come to explain the manner of their union, or of their action, they do not agree. SCHEUZER supposes that the devil assumed *pro tempore* the figure of a serpent; and this is a frequent and customary notion.

It is likely, that attention to the roots of the words used, would greatly assist in this enquiry. 1. As to the speech of the serpent—are we sure that he *spoke*?—We find speech attributed to God in various parts of Scripture, where vocal words are not intended; so when God *said*, “let light be,” &c. is it certain that he *spoke*? 2. What is this *nachash*? is it certainly a serpent? what kind of serpent? ten or a dozen names of serpents expressing different kinds, occur in the Bible—which kind is it? Was this *nachash* a distinguisher, an observer, a prying *insidious* enemy? rather than “subtle;” though indeed these senses are very coincident with each other. Having no adequate grounds for opinion on this subject as naturalists, we relinquish the investigation to schoolmen and divines.

VERSE 7.

They sewed FIG-LEAVES together, and made themselves CINCTURES. Our word *apron* was formerly perhaps more correctly descriptive of the parts alluded to than it is now become by usage: this hint is sufficient to any who have read our old English medical writers.

Fig-leaves. There is a species of tree in the East called *Adam's fig*. Some have thought, a very broad leaved plant was the one chosen; others think a leaf with thorny prickles on it, by way of penance; but we have no authority in favour of one kind more than of another, as being that which our first parents employed on this occasion.

While the Sovereign authority of Reason and Piety governed the human mind, there was no part of the human frame which needed covering; but, after those parts which are appointed to the communication of life in the species felt the influence of mental irregularity, it became decorous to conceal from the observation of others those effects, the result of passion and infirmity, of which the individual could not be unconscious: from the unwillingness of the individual to be exposed, from desire to be thought superior to transports which imply corresponding weakness of reason, the individual adopted coverings and concealments; and these though formed at first of fig-leaves, have since

comprised whatever mankind could discover or invent of personal ornament. This we now call *natural* to mankind; just as natural as the dominion of the inferior propensities of our earthly nature over the superior faculties and principles of the mind! natural now, but not natural originally.

VERSE 18.

THORNS also and THISTLES, shall the earth bring forth to thee. (קוצ ודרדר, Kutj ve dardar) lxx. ακανθας και τριβουλες, thorns and *tribules*; St. Paul uses the same words, Heb. vi. 8, where the last is rendered “*briers*,” they are also found, Hosea, x. 8. The word (קוצ, KUTJ) is put for thorns in other places, as Exod. xxii. 6. Judg. viii. 6. Ezek. ii. 6. xxviii. 24. but we are uncertain whether it means a specific kind of thorn, or may be a generic name for all plants of a thorny kind. In the present instance it seems to be general, for all obnoxious plants, shrubs, &c. by which the labours of the husbandman are impeded, and which are only fit for burning. The radical import of the word is to *fret*, or to *wound*, or *tear*.

Tribules, briers, which answers to the Hebrew (דרדר, DARDAR) is the name of certain prickly plants. Dioscorides, lib. iv. cap. 15. distinguishes two kinds; one *terrestrial*, the leaves of which are like those of the purslain, but smaller; it extends its lesser branches on the earth, and has all along its leaves stiff and hard thorns. The other kind is the *aquatic*, the *tribuloides*: which, says TOURNEFORT, is common enough in the waters. But the most eminent of the brier kind, seems to be Mr. BRUCE's *Kantuffa*, or brier of Abyssinia. Vide BRUCE's Travels, vol. v. p. 49.

It is certain that our word *thistle* does not denote the plant, or plants, meant by this Hebrew word; and besides, it loses the reference to this passage, which probably was meant in the places quoted above. We are not to suppose that thorns and briers were now for the first time created; but, 1. they now became vexatious, as they grew more abundantly and vigorously, perhaps from favourable seasons; 2. as man was expelled from his garden to till the land, where they were native, and consequently most prolific and troublesome.

Thou shalt eat HERBS OF THE FIELD—of the common field; coarser food, not the exquisite *fruits* of Paradise: the *very* (רע) herb of the laboured, cultivated field: and in the sweat of thy face shalt thou eat—which sweat is the consequence of thy labour. *Bread* is put for *FOOD in general* (לחם, Lechem). The word in Hebrew imports so much, as it does also in Arabic.

VERSE 21.

Coats of a skin. Skins have been worn as clothing by many nations, the Tartars, the Hungarians,

the Laplanders, the Finlanders, the Russians, still wear skins, or furs: the ancient heroes of Greece, and of Asia, covered themselves with the spoils of lions, of tigers, and wild animals; while the ancient Germans wore short coats of sheep-skins, called *rhenones*. In fact, a skin in its natural state is an effectual defence against both heat and cold; and for duration nothing surpasses it; even our own woollen manufactures form what may be called coats of skins; since the fleece is the clothing of the animal, and the production, at least, of his skin, though not the skin itself.

From this simple clothing, designed to hide those effects of the imagination on certain members of the body, which occur in spite of cooler reason—from this *one* skin divided between Adam and his consort, has arisen the whole art of dress and personal decoration; impelled by which mankind collects the down from plants, the wool from sheep, silk from the worm, and thread even from the spider. Hence the variety in-dresses of different nations, of the same nation, of the same person: what part of the creation has not furnished its *quota* to decorate a British belle?

It is supposed that Adam procured this skin from an animal slain for sacrifice; which implies his being taught to slay it, and to skin it; also, probably, its consumption by celestial fire; for, from whence should Adam be able to extract fire for this purpose, or what should induce him who had never seen fire, to think of that manner of consuming the victim?

The further notion of sacrifice belongs to the History of the Bible, as does the distinction between the sacrifices of Cain and Abel: we only remark further, that the very idea of a *skin* implies a *slain* animal; and for what more proper, or more probable purpose, can we suppose an animal could be slain, than for sacrifice?—not for human food, surely!

CHAPTER VI. VERSE 2.

THE SONS OF GOD saw the daughters of men.—

The reader has seen already the proposal to render the word **ALEIM** by *dignitaries*, in the temptation of Eve, “ye shall be as *dignitaries*,” supreme, sovereign, ABOVE THE LAW; the same notion I would connect with this passage, “the **SONS OF DIGNITY**,” of power above the law: in fact, the emperors, *imperators*; and self-ruling powers, *autocrats*; *q. d.* “the sons of the *dignitaries* saw the daughters of the inferior classes of men; and they formed their seraglios, by collecting them into their harems, from among all whom they chose.”—Now, it is very natural that this should be resisted; and thus wars and commotions, VIOLENCES of

every kind took their rise from the uncontrolled indulgence of a sensual appetite. When Adam and Eve beheld that *they* were naked, that certain impulses no longer obeyed the dictates of intelligence, but those of passion, *they* were *ashamed*; whereas, these, their descendants, indulged what their first parents had studied to conceal, and by concealment had endeavoured to subdue.

This view of the passage is not new: Onkelos, and the Targums read, *the sons of the great*; the Sam. reads, *the sons of the sultans*; Arab. *sons of the nobles*; but it takes off entirely the notion of angelic commerce with women; or of the descendants of Seth, *as sons of God, i. e.* good men, mingling with the beauties of the house of Cain.

VERSE 14.

Make thee an ark of GOPHER WOOD; rooms [margin nests] shalt thou make in the ark.

On the question, What is this species of wood? various opinions have been adopted by translators, ancient and modern; a general idea may shew their opposition to each other. Some would render *gopher* “cypress wood,” because it is incorruptible; as Martial says, lib. vi. Ep. 49.

*Quæ nec secula centies peracta
Nec longæ cariem timet senectæ.*

“It fears neither the revolution of an hundred years, nor the rottenness which attends prolonged old age.” Now, of this perpetuity, the Hebrew of Genesis makes no mention. On the other hand, Dr. GEDDES says, the ark was made of *wicker work*!—and Abraham Dawson renders, “Make thee an ark of *bulrushes*; of *reeds* shalt thou make the ark!”—Opposite sentiments surely! five hundred feet of wicker work! of rushes and reeds! But to understand our author, let us endeavour to conceive what he proposes to describe, *q. d.* “You, Noah, have been used to dwell on this hill, &c. and to reside in houses built upon it; these you have seen constructed occasionally in a square form, five or six times as long as broad, and always fixed to the earth by means of the uprights inserted into the ground, you have seen placed many uprights, and these have been faced outside and inside with laths and plaster, rather than built more solidly with brick or stone: construct now such a house, only instead of fixing it into the earth, let it stand free from it, nor let the uprights go into the ground, but into timbers laid along the surface; by this means this house will become a square box of certain dimensions, [an ARK] capable of being lifted up from the earth when occasion requires. To build this ark take *two kinds of woods* [יָבֵץ, OTZI, plural] *GOPHER, i. e.* the *in-flammable*, resinous kind (the *PINE*) for the uprights,

rights, the main beams, the ribs and other places requiring strength; which kind of tree abounds on the mountains, as its natural place of growth: also, [קָנָן, KANAN, reading with the margin], long canes, which grow in every marsh around you; nail these along the upright ribs, both on the outside, and on the inside; then plaster over them a good coat of bitumen to close every chink between these canes, to render them perfectly water-tight; just as you have seen laths coated with plaster to keep out wind from your houses."

Can a more easy conversion of ideas from the building of a *standing* house, to the building of a *swimming* house be proposed? Let us now justify our version.

TEBET, a box; *i. e.* a box-shaped edifice: the size does not alter its figure.

GOPHER, this word occurs here only; but its relative *gophrit* signifies *sulphur* in the Chaldee and Arabic; and we read, Gen. xix. 24. that God rained on Sodom, &c. *gophrit*—"brimstone," *i. e.* inflammable—inflamed—sulphur; the same frequently elsewhere. Now what wood is more (or equally) likely to be named *gopher* from its *inflammability*, than the pine? which furnishes pitch, tar, and turpentine, all among the prime of inflammables; and that in its natural state this wood is capable of taking fire, needs no other proof than the frequent use of its splinters, instead of candles in the north, as well of Europe, as of America. Take an instance from CARVER'S *Travels*, in the latter country, p. 123. "The tent was perfectly illuminated by a great number of torches made of splinters cut from the PINE [or *birch*] tree, which the Indians held in their hands."

The opinions of the ancient interpreters may be found not irreconcilable with these notions: the lxx. read in our common copies "*squared beams*," or woods [RIBS, QUARTERINGS] ξυλων τετραγωνων, in other copies, with Chrysostom, *incorruptible*, *i. e.* sound and firm, as ribs and uprights should be; Vulgate, *lignis laevigatis*, smoothed beams; or as Jerom says, Heb. Quest. *quadratis lignis*, squared timber; the Persian, *the pine*: the Samaritan has a word also thought to mean the *pine*. So that some express the nature of the wood, or its species; others express its state.

CANES, the word in our text is (כִּנִּים) KENIM, understood to mean *cells* or *chambers*; but a reading preserved by the *keri*, KANAN, undoubtedly means *canes*. As both words stand equally fair for acceptance, we may adopt either. In the Chaldee and Arabic this word signifies canes, reeds, &c. which are capable of being split lengthways, [σχίζαι, *ligna fissa*, *scissuræ*—and this those around the ark might be. The measuring cane of Ezekiel, chap. xl. was in length six cubits; verse 5, he says also, the measure was in breadth one cane

["threshold of the gate one reed broad."] We know that in East India some kinds of canes grow to a great length, (for there are many different kinds,) and upon the whole no fitter material could be adopted to *lath* these ribs of the ark with; witness the accounts of our late voyagers to the South Seas, &c. &c.

Now, if to this great box we add divisions into three stories; we have in fact a house, like many houses in hot climates, three stories high, unattached to the earth, therefore capable of being buoyed up from it. This might answer the purpose of a *lodge* to part of Noah's family long before it became the mean of their safety; and it might pass for "the royal whim on the mountain," the reasons for its capricious construction being utterly inconceivable or incredible, among the antediluvian dignitaries, and the heroes their sons.

CHAPTER VII. VERSE 1.

THE DELUGE took place, according to the computation of the Hebrew copies, A. M. 1656. No doubt but these years are solar years, each containing twelve months of thirty days each, as appears from calculating the number of days, Gen. viii. 3, 4. (the waters retired after 150 days; the 17th day of the seventh month the ark grounded on Mount Ararat) and this calculation of 360 days to the year, was probably the true period of the year before the flood; it was retained among mankind long afterwards, and is the prophetic year so late as the date of the Revelations.

VERSE 11.

The sacred text proposes two causes of the deluge; 1. a discharge of water from the entrails of the earth; 2. a continuation of rain from the atmosphere. These deserve separate consideration, because this part of the Mosaic history has been attacked with great violence. Nevertheless, we must acknowledge, at the same time, that we would not wish to affirm, whether or not they were absolutely distinct and different in their causes.

We are under the necessity of inferring that like as we find waters, streams, and rivers, beneath the surface of the earth, however deep human efforts have excavated, and as we know of seas that have no bottom, whatever length of time is employed in sounding, so, we are under the necessity of inferring, that somewhat of the same kind is the construction of the earth, if not to its very center—yet, to a considerable depth of its mass. Nor let this be thought an unreasonable inference: what we know may guide us to what is beyond our knowledge, whenever we have no better mean of determination; and at any rate we have this advantage over those who deny our premises,

premises, that they are at least equally uninformed on the actual state of this fact, and have nothing to shew in support of their negation.

On the same principle we assume, that volcanic fires exist *deep* in the earth; in like manner as we know they do at the bottom of many seas. I say, we know they do—because, we perceive their effects in throwing up islands in the midst of the ocean; volcanic islands, and other phenomena, which can be accounted for on this supposition only.

To these principles must be added a third; that of the compressibility of water; and this must be proved, because, perhaps it may not be so readily allowed as the others, which are admitted by every naturalist, and are established on actual observation.

Air is a compressible fluid, and the higher we ascend it is lighter; the lower we descend it is heavier: the same is the nature of water, which, at the surface of the sea is of a certain specific gravity, but, as we descend, that gravity increases, insomuch, that by using a very considerable length of line, we reach a station where metal itself almost floats. I understand that it is a practice among seamen trading to the East Indies, and elsewhere, occasionally to hoist out a boat, and try which way the current sets. To determine this, they load a metal kettle with shot, or &c. then fixing a rope round it, and over it, so as to keep the mouth uppermost, they lower it into the sea to the depth of 80, 90, 100 fathoms, or more, till the kettle rests so firmly as to steady the boat to which the other end of the line is affixed; and by this means they ride as easy in the midst of the sea, as if they were at anchor in port. Now this kettle, though made of cast iron, would not be able to sink so far by a great deal, if it were *empty*, as it does when loaded, *i. e.* it would not be able to overcome the resistance it meets from the water. If such be the fact, on that *very small* depth of water, which our utmost efforts can penetrate, we have only to pursue this idea, by supposing that the density of water increases proportionately, as it approaches the center of the globe, [as we know that of air does,] and we shall perceive that at an hundred miles depth under water, at five hundred miles depth under water, this element may be so compressed, that a square foot of it would occupy more than one hundred, or than five hundred times the space which it now occupies, were it relieved from the pressure of superincumbent weight, and brought up to open day. I say, the *lower* waters are more dense than the upper; as the lower strata of the atmosphere are more dense than the upper. So far the theory is justified by fact; and on the same reasons as we admit volcanic fires beneath our superficial sea, we

may admit the existence of such fires beneath any depth of water:—why not at a hundred miles as well as at one mile?—at five hundred miles as well as at five miles? Such we presume is the internal organization of the earth.

This leads then to the *fountains of the great deep*; which says the sacred Historian, were *broken up*; by this I understand the unusually extended and directed action of those natural causes already mentioned; *i. e.* the admission of a certain quantity of *deep* water to the fire beneath it; the conversion of this water into steam, the consequent expansion to an unlimited extent, of this condensed water, now rarefied, how many thousand times! beyond its *former state*, and now exploding in all directions, seeking issue, seeking vent, wherever it may be found.

But, though this rarefied water would seek issue in all directions, yet it would penetrate where it was opposed by the least resistance; and this would naturally be where the fluid above it offered a ready mobility, or found a way of escape; this fluid then being driven from below to higher regions, would rise, till something like an *equilibrium* was restored between the power of that rarified steam, or that raging fire, which impelled the heaving waters, and the space occupied by the perturbed flood. This refers to the submarine *waters*, and their connections with the superficial seas.

It may yet be enquired in what solid parts of the globe this cataract might burst forth. Reasoning on probabilities, it would seem that where is least thickness of earth, there would be the weakest resistance; consequently, the diameter of the globe being smallest from pole to pole by many miles, the parts around the poles might first give way, and suffer this liquid explosion. In consequence of such a convulsion of nature: 1. the water would issue in immense volumes at first, but, as it approached the equator its *impetus* would be diminished; 2. because it would be weakened in power as it extended in surface; now, from the poles it would naturally extend itself all around, radiating, as it were; so that whatever were the violence with which it burst forth,—at the distance of an hundred miles from its mouth, still more at the distance of five hundred miles from its mouth, it would have acquired a comparative degree of smoothness; add to this, that all the way to the equator it would be running *up hill*, in proportion to the difference of the earth's equatorial and polar diameters: now, the effect of this, though trifling where the water issued, yet would be felt after it had travelled some way; after its *impetus* was diminished: and still more e'er it reached the equator; where the two opposing currents would meet, and mingle; and where both of them would be affected by the impulse of the globe's

globe's diurnal rotation, at right angles with their courses; and by the effect of the lunar attractions also, forming compound motions, all in abatement of their vehemence.

This discovers another advantage arising from placing Paradise in a hilly country, (for I take it as undeniable that the genealogy of Noah is, that of settled sovereigns over this very district) that the ark would be floated *gradually*, since the waters would not reach the height till after a time: the same *spread* of the waters would drive the animals in the neighbourhood together, and they would naturally seek refuge in hills and uplands, so that from among those refugees which now sought an asylum in his domain, Noah might chuse what individuals he pleased; and these, perceiving the ark to be the only place of safety, the only *dry* refuge remaining, would readily there take up their abode, and submit to the laws of that necessity which occasioned their consociation.

The waters now surrounding the ark, and rising in altitude daily, would at length float her; but as she was loose from the ground she would rise without danger. As she was built for *floating* only, not for *sailing*, it is very doubtful whether she was wafted to any considerable distance; because, *first*, it might be that there was no *prevailing* current to carry her toward any particular point, since among hills the water might approach her various ways, yet every way its power would be broken: *secondly*, what current there was would perhaps only gradually raise her up the side of the nearest mass of mountains, which we shall suppose to be Mount Ararat; and here she must have been stationary, some time at least, since otherwise Noah could not have known to what height above the mountains the water prevailed: *fifteen cubits*, says the sacred writer, the waters were in depth in the shallowest place; (on the tops of the mountains,) about twenty-two feet; not so high as some of our houses, not so high as many kinds of trees; so that if there were trees of the present mountain kinds on Mount Ararat, Noah might calculate the daily accretion of water, by its progress up their trunks and branches, yet leaving their tops visible.

Now, it is indifferent whether we suppose Noah was at anchor or not in such a station; but twenty-two feet of water offers no impediment in itself, to his being moored head and stern, if that was proper, for the whole or for part of the time. This representation banishes Noah from *terra firma* the shortest time possible, since he saw the mountain tops the last objects of all; and it restores him to sight of land again the soonest possible; because the waters would naturally quit the mountain tops the earliest of anywhere. Imagine them therefore to have reached their height, and now to be gra-

dually sinking, gradually returning to the places they formerly occupied; the force of the internal fire being abated after a year's activity; and we have only to invert the order we lately mentioned. The Patriarch would soon feel the ark strike against Mount Ararat; then he would see the mountain tops, then the hill tops, then the rising grounds, and at length the plains. Now, this is independent of the forty days, &c. rain; which at any rate would destroy all who took shelter in the mountains, &c. as they could not have provided against so long absence of the supports of life, and so long exposure to an inclement atmosphere.

The reader will perceive in this hypothesis an endeavour to render those facts with which we are acquainted in respect to the structure of the earth, available to support the general principles: of the facts themselves there can be no doubt; on the application of those facts individuals may be allowed to differ; but certainly the simplicity of this theory is no small recommendation of it.

Let us see how these observations apply to the preservation of Noah. Poetical fancy, and lively imagination, have exerted themselves to depict in the most terrific colours, the storms, the tempests, the labouring oceans, the convulsive floods, which beset the great Patriarch; but, we should consider the gravity of the *upward* movement of the waters impeding, *generally*, their velocity; while every hill and mountain would *locally* impede their velocity also; so that by the time they arrived at the top of the high mountains, they would probably be little more boisterous than what occur on the coasts of the ocean; and this moderation of their power would favour very greatly the safety of the ark, in riding out this great war of elements.

No doubt but at his return to life, as it were, all the earth, the plains, especially, exhibited a very different aspect from what they did when Noah last saw them; what had been verdure and fertility, the hope and joy of the husbandman, and cultivator, was now ruin; either marsh land, only half recovered from the water, or barren sand; an expanse of unproductive desert. If it be asked what traces of the deluge still remain? An answer might refer to that great proportion of the globe, which is yet covered by water; a partial effect probably of the general deluge: also, by pointing to those deserts where shifting sands prohibit vegetation and life. These appear to be lasting memorials of that great catastrophe, free to human inspection, on the surface of the globe: while the numerous fossil bodies, procured by digging into the solids of the earth itself, unite their testimony in attestation that some great convulsion had displaced them from their native stations, and had imbedded them where they are now found far, far from home.

I know

I know that to reason on the works of Omnipotence by comparing them with the feeble efforts of man, is almost ludicrous; for, what can worms of the earth accomplish?—yet those who are not satisfied with this power attributed to the force of expanding steam, would do well to recollect the expansive effects of gunpowder; how that rends the very rocks! but the force of steam, when urged by heat, is fifteen hundred times greater than that of gunpowder; and could we conceive to what prodigious rarefaction water might be raised, by the activity of central fires, we must allow, that there is no deficiency of power in the agents alluded to; nor is this all, for we have accounts of volcanos pouring out floods of water, as well as masses of melted minerals, so that there seems to be a closer connection between these two elements, than is usually suspected.

The incredulous should be further reminded, of the surprising power of our steam engines, from what depths they drain the mines, and in what considerable quantities, by means of a little rarefied water. The same principles, on a scale of proportionate magnitude, are competent to burst the solid bands of earth itself, or any other explosion, be its subject what it may:—they are competent—but they must wait their commission: we are mentioning the means used, not canvassing that supreme power which directs them.

Undoubtedly this theory, which finds the principles of this great convulsion of the globe, within the globe itself, excludes those sublime descriptions of wasted continents falling into the abyss, with which some have amused themselves; and those portentous comets which others have regulated by mathematical calculation; the possibility of their impulse indeed no one can deny, yet their agency on this occasion is not sanctioned by any record, sacred or profane. But the reader will judge, whether it be not more advisable to reason from what we see and know, and from powers within our comprehension, rather than from what we must ever be ignorant of, and what when we most want its application eludes our research.

CHAPTER VIII. VERSE 7.

THE RAVEN SENT OUT.

AFTER the decrease of the waters, Noah sent forth from the ark a raven, whereby to discover what was the actual state of the earth. It is likely, that at first this bird flew around the ark to a little distance, then returned and settled on it; at length he flew away, and did not return again. This reconciles the Hebrew, which mentions, "going and returning," with those versions which say he did *not* return, *i. e.* for a permanent residence, or to his station within the ark. The

Jews have many fables on the subject of this raven; not omitting a sharp conversation between the unwilling bird and the commanding patriarch. It is probable that the adoption of the raven, as a bird of augury, arose from this employment of him by Noah: he was consecrated to Apollo, *i. e.* the sun; and was a principal bird among those who sought omens. The raven is a bird so well known, that it is superfluous to describe him.

THE DOVE SENT. VERSE 8.

The raven, as we have seen, was sent out on discovery, but discharged his commission badly. He is a bird of unclean manners; carnivorous; of prey; neither fit for food nor for sacrifice. The dove is a bird of very different character, pure, mild, good for food, and living on grain; he also has this particular to him, that from an incredible distance he knows the way back to his nest, and to that nest he returns. This dove, incapable of feeding on carrion, or the carcasses of the dead, whether men or animals, returned to the ark: the vast marsh which lay before him, yielded him neither food nor pleasure: the ark therefore was his refuge.

The Dove is too well known to need description.

THE OLIVE LEAF. VERSE 11.

Seven days after the first dove was sent out and returned, Noah sent out a second, which returned to the great father of the new world, in the evening, bringing an *olive leaf*, which he had plucked off—but not from Mount Olivet, as some have fancied. The dove was dismissed in the morning, and did not return till the evening; so that, he had rested somewhere during the day. Though the olive preserves the verdure of its leaves even under water, yet this leaf was, probably, expanding itself afresh, since the waters had retired: it was not an old leaf, though in that case it would have shewn the decrease of the waters, otherwise the dove could not have got it, as he could not *dive* for it; but it was a young leaf; which also demonstrated the revival of the vegetative powers of nature. Was the tree which yielded this leaf growing?—in its natural position?—in its native bed? Or, was it some tree, which after having been driven by the waters, had taken root amid the mud of the deluge on some clump of earth?

We ought to observe, that the Samaritan (and one Heb. copy) reads *leaves*; the *Syriac*, *Onkelos*, and the *Vulgate*, read *branch*; perhaps the truth embraces both ideas, "*a sprig of olive leaves*," was what the dove brought to Noah; and hence the olive branch has ever been among the fore-runners of peace, and chief of those emblems by which a happy state of renovation, and restoration to prosperity, has been signified among mankind.

CHAP-

CHAPTER IX. VERSE 20.

THE PROPHEPIC MALEDICTION of Noah has occasioned more than one witty sarcasm on the conduct of the great patriarch; and through him on the Holy Spirit, who spake by his mouth. "One would think the prophet to be drunk still; he curses the son not the father, the innocent not the transgressor," says a writer of name on this subject; it is, therefore, worth our while to endeavour to obtain a fair understanding of this history and its references.

First, as to the true reading of the passage:—the name *Canaan* is not read in the Aldine edition of the lxx. and in seven MSS. collated by Dr. HOLMES, but HAM is made the subject of this curse. The Arabic version reads both names, "Ham, the father of Canaan; the Greek of Venice places the curse of Canaan separately after all. I must own, I think the words "the father of Canaan," in the Arabic version, have very much the air of a note, received into the text by way of explanation. Add to which, the testimony of the Indian records, which we have formerly seen attribute the guilt, and direct the punishment, to Ham only. The passage perhaps ought to stand thus, according to its sense:

* The father of Canaan.

Verse 22.—"And Ham [*] saw, &c.

24. And Noah awoke from his wine, and knew what his younger son [*i. e.* HAM] had done unto him: and he said,

* The father of Canaan.

"Cursed be Ham, [*]
A servant of servants shall he be." But of his brethren he said,
"Blessed of [the Lord] my God be SHEM:

He shall dwell in tents of STABILITY." [*dignity.*]

"May God enlarge the enlarger [JAPHETH,]

And Canaan shall be the slave of both."

That the passage is damaged can hardly be doubted; but whether the foregoing be a fair conjecture on its ancient state must be submitted.—However it assists in shewing what was text, and what notes; and if the last verse of the prophecy be correct, as read by the Greek of Venice, then it shews the propriety of the two foregoing notes, which point at Ham as the cause of the curse on Canaan: though that curse is postponed to the last; indeed, it was natural Canaan should be included, if he were so unhappy as to have participated in the crime of his father, as the Jews affirm.

At any rate the patriarch must be vindicated from the charge of omitting to punish Ham, if we may depend on the concurrence of other eastern accounts; for instance, in "the History of the

World," translated from the *Khelassut ul Akhbar* of *Khondemeer*. [Asiatic Miscellany, printed at Calcutta, vol. i. p. 147,] speaking of Ham, he says, "Noah assigned to him the nations of Africa. The occasion of the colour of his sons was, that Noah being one day asleep discovered his nakedness, and Ham passed that way without covering him; on which account his descendants are born with black complexions, and the gift of prophesy was taken from them." Our present business is with Ham only, and we mean by uniting these testimonies to establish the following propositions. 1. Noah assigned Africa to Ham. 2. Whoever inhabits Africa, becomes of a black complexion, from the nature of the country [the descendants of the Portuguese settlers on the coast are become black, in less than 300 years.] 3. Whoever inhabits Africa, is liable to slavery, from the nature of the country; so that to mention Africa, as a native soil, is to include the ideas of swarthinness, blackness, and slavery.

That the Africans are black from the nature of their country is notorious; and it is equally to our purpose, whether this colour be occasioned by excessive heat, mineral exhalations, or any other cause.

But it remains to be proved, that Slavery is natural to Africa; this arises from the little fertility of some parts of this country. Where, during a season of scarcity, parents sell their children and themselves for the sake of sustenance, in such a country, slavery seems to be a natural production of the climate. This principle is supported by the accounts of MUNGO PARK, in his Travels in Africa.

SLAVES.

"This unfortunate class are found, I believe, in all parts of this extensive country, and constitute a considerable branch of commerce, with the states on the Mediterranean, as well as with the nations of Europe," p. 286.

"The negro merchants come from very far east;" p. 244. These probably then are descendants of Shem, which settled in the East.

"In this condition of life a great body of the negro inhabitants of Africa have continued FROM THE MOST EARLY PERIOD OF THEIR HISTORY: with this aggravation, that their children are born to no other inheritance." p. 287.

"Slaves are in proportion of three to one to the freemen; they claim only food and clothing."

"Domestic, *i. e.* home-born slaves are treated with greater lenity than those bought with money. In time of FAMINE, the master may sell domestic slaves for provisions. Creditors of the master may seize them.

"Regular markets are held for slaves, who are transferred from one dealer to another, to a very great distance. They are brought down in large

caravans from the inland countries; many of which are unknown even by name to Europeans. There are two classes. 1. Slaves by birth;— 2. Free-born, but become slaves. When *Mansong*, king of *Bambara*, took 900 prisoners, *only 73 were free-men: the rest were slaves*. The causes of slavery are, 1. War—public: 2. Plundering, or stealing, which arises from hereditary feuds, maintained by one district against another: without notice given they plan schemes of vengeance, conduct them with secrecy, surprise in the night some unprotected village, and carry off the inhabitants, &c. before their neighbours can come to their assistance." p. 293. These are made slaves; retaliations make more slaves; and thus there is an endless concatenation of passions; all of which lead to the maintenance and propagation of slavery.

"Slaves are commonly secured by putting the right leg of one, and the left leg of another, into the same pair of fetters. By supporting the fetters with a string they can walk, though very slowly. Every four slaves are also fastened together by the necks, with a strong rope of twisted thongs; and in the night an additional pair of fetters is put on their hands, and sometimes a light iron chain is passed round their necks." p. 319.

The moors are the masters, or rather tyrants of the negroes; the negroes are little other than their slaves.

"I have observed that the moors, in their complexions, resemble the mulattoes of the West Indies; but they have a something unpleasant in their aspect, which the mulattoes have not. I fancied that I discovered in the features of most of them, a disposition towards cruelty and low cunning; and I could never contemplate their physiognomy without feeling sensible uneasiness. From the staring wildness of their eyes; a stranger would immediately set them down as a nation of lunatics. The treachery and malevolence of their character, are manifested in the plundering excursions against the negro villages. Oftentimes, without the smallest provocation, and sometimes under the fairest professions of friendship, they will suddenly seize on the negroes' cattle, and even on the inhabitants themselves. The negroes very seldom retaliate. The enterprising boldness of the moors, their knowledge of the country, and, above all, the superior fleetness of their horses, make them such formidable enemies, that the petty negro states which border on the desert, are in continual terror while the moorish tribes are in the vicinity, and are too much awed to think of resistance." p. 159.

"The slaves are tied together by their necks with thongs of a bullock's hide, twisted like a rope; seven slaves upon a thong; and a man with a musket between every seven." p. 192.

Many of the slaves are but ill-conditioned: a great number of them are women.

"The reader must bear in mind, that my observations apply chiefly to persons of *free condition*, who constitute, I suppose, *not more than one-fourth part of the inhabitants at large*; THE OTHER THREE FOURTHS ARE IN A STATE OF HOPELESS AND HEREDITARY SLAVERY; and are employed in cultivating the land, in the care of cattle, and in servile offices of all kinds, much in the same manner as the slaves in the West Indies. I was told, however, that the *Mandingo* master can neither deprive his slave of life, nor sell him to a stranger, without first calling a *palaver* on his conduct; *i. e.* bringing him to a public trial; but this degree of protection is extended only to the native or *domestic* slave. Captives taken in war, and those unfortunate victims who are condemned to slavery for crimes or insolvency, and, in short, all those unhappy people who are *brought down from the interior countries for sale* have no security whatever, but may be treated and disposed of in all respects as the owner thinks proper. It sometimes happens, indeed, when no ships are on the coast, that a humane and considerate master incorporates his purchased slaves among his domestics; and their offspring at least, if not the parents, become entitled to all the privileges of the native class. Most of these unfortunate victims are brought to the coast in periodical caravans; many of them, *from very remote inland countries*; for the language which they speak is not understood by the inhabitants of the maritime districts." p. 23.

"The value of a slave in the eye of an African purchaser, increases in proportion to his distance from his native kingdom: for when slaves are only a few days' journey from the place of their nativity, they frequently effect their escape; but when one or more kingdoms intervene, escape being more difficult, they are more readily reconciled to their situation. On this account, the unhappy slave is frequently transferred from one dealer to another, until he has lost all hopes of returning to his native kingdom." p. 288.

"Prisoners of war in Africa, are the slaves of the conquerors; and when the weak or unsuccessful warrior, begs for mercy beneath the uplifted spear of his opponent, he gives up at the same time his claim to liberty; and purchases his life at the expence of his freedom." p. 290.

"When I was at Jarra, Daman Jumma pointed out to me three young slaves which he had purchased in this manner, [for an allowance of food.] Another instance I saw at Wonda; and I was informed that in Fooladoo, at that time, it was a very common practice." p. 295.

At Wonda.—"The scarcity of provisions was certainly felt at this time most severely by the poor people

poor people, as the following circumstance most painfully convinced me. Every evening, during my stay, I observed five or six women come to the *Mansa's* house, and receive each of them a certain quantity of corn. As I knew how valuable this article was at this juncture, I enquired of the *Mansa*, whether he maintained these poor women from pure bounty, or expected a return when the harvest should be gathered in?—"Observe that boy," says he, (pointing to a fine child about five years of age) "HIS MOTHER HAS SOLD HIM TO ME FOR FORTY DAYS' PROVISION for herself, and the rest of her family: I have bought another boy in the same manner." Good God! thought I, what must a mother suffer before she sells her own child!" p. 248.

"There are many instances of free men voluntarily surrendering their liberty to save their lives. During a great scarcity which lasted three years, in the countries of the Gambia, great numbers of the people became slaves in this manner. Dr. LAIDLEY assured me, that at that time MANY free men came and begged with great earnestness, TO BE PUT UPON HIS SLAVE CHAIN TO SAVE THEM FROM PERISHING OF HUNGER. Large families are OFTEN exposed to absolute want; and VERY OFTEN the children are sold to purchase provisions for the rest."

It appears from this clear and decisive evidence, that slavery in Africa arises from two causes: 1. the angry passions of the natives; 2. the infertility of the country. May not both be included in the interjection of the patriarch Noah? "Alas, for my son Ham! I foresee that the same irreverence for the relations of society will pervade his posterity, as he has recently exhibited in his own behaviour!—They will be like him, rough, brutal, almost savage!—I give him, therefore, as his portion, a country separated from his brethren, a continent by itself, where those who will labour may subsist by their labour; but where those who are improvident, unsocial, disobedient, will suffer the famishing consequences of their conduct and character; and will often be obliged to sell their liberty to save their lives. His posterity will be servants of servants; and I punish his present arrogance of temper and conduct, by predicting what he may expect in his future generations." Since then, this prophecy has been fulfilled, is fulfilling, and in spite of the most benevolent intentions to the contrary, will continue to be fulfilled while nature shall remain the same, it forms an undeniable evidence to the truth of that passage of Scripture which is under consideration. Present facts are a standing comment on this incident of the Mosaic history.

The paraphrastic or circuitous phrase employed by Noah, "a servant of servants," to describe a state of absolute slavery, deserves notice. We read of *servants*, of *bond-servants*, &c. in after ages; but the first mention of servitude is this

prophetic denunciation of *extreme* subjection: a state not familiar to the patriarch; but seen by him as an event to be accomplished in remote posterity.

Since Africa was to be peopled, by whom should it be colonized?—Not by Shem, he had a better soil in Asia:—not by Japheth; his enlargement could not have been accomplished in Africa: Ham as least deserving, Ham as careless and incautious, Ham as the youngest son, had the least valuable allotment.

The foregoing illustration of the prophetic malediction of Noah, in respect to his son Ham, has novelty, and certainly testimony, to a degree of credibility, in its favour. Perhaps, some other of the great patriarch's words may receive the true sense, if we consider them also in reference to that distribution of the earth among his sons, which is evidently the intention of their father.

God shall ENLARGE the ENLARGER, *i. e.* JAPHET. We have no phrase in our language which is capable of rendering this play of words *neatly*. The fact, however, is our object.

Japhet received for his portion—(vide the MAP of the TERRAQUEOUS GLOBE)—of Europe, the whole; of Asia, the northern parts; which are very extensive, and approach so nearly to North America, that no doubt America was peopled from thence; in fact, the strait of separation is so narrow, that a ship sailing along it, may discern points in both continents, at the same time. So that, the enlarger is enlarged—*first*, by receiving so great a portion as the whole of Europe, and full half of Asia; *secondly*, by receiving the whole of North America, and circumstances appear to infer, South America also; but if there be any suspicion that this part of the world was peopled from Africa, or elsewhere, we may leave this undecided, without diminishing the inference of the possession by Japhet, of much more extensive countries than either of the other brothers occupied. Compare this with the diminutive portion of Ham: inferior in dimensions, in temperature, in fertility, and in salubrity; the contrast is striking! Now this fact justifies the authority of Noah's prophecy; and it justifies too this sacred record of it, of which this *geographical* statement is a full and *undeniable* confirmation. [This is independent of the consideration of the European settlers on the East of America; which are descendants of Japhet; not of Ham.]

There remains only to enquire the import of the blessing of SHEM; which seems to be ambiguous. As if Noah had said,—*He* (Shem) *shall dwell in tents of stability, i. e.* "he shall not remove from that part of the world where he now dwells; but shall inhabit Asia, and be my representative when I am removed to a better life." This sense of the prophecy is a fact; for the descendants of Shem to this day occupy the countries where the great ancestors of the human race had their original residence.

dence ; as appears by the map. But, there is another sense, of which the passage is capable. *He* (God) *shall dwell in the tents of stability* : now this is equal to saying, "God shall dwell in the tents of Shem ;" since the name *Shem* imports *stability*, a settled disposition. This sense also is fact, since Shem was priest to the Noachical family, consequently to all mankind : but this enquiry appertains to the History of the Bible, not to its Geography.

*Application of the MAP OF
THE WORLD AS KNOWN TO THE ANCIENTS,
shewing the settlements of the sons of Noah.*

SONS OF JAPHET.

1. GOMER.—Vide in the map, the British Islands, and Germany : lat. 50 to 60 : long. 10 to 40.
2. MAGOG.—(This word I presume should be pronounced *Majuje*) Vide in the map Seythia : lat. 40 to 50 : long. 80 to 100.
3. MADAI.—Vide in the map Media : lat. 35 to 40 : long. 70.
4. JAVAN, or *Jaun*, or *Iones*.—Vide in the map Greece, Asia Minor : lat. 40 : long. 40 to 50.
5. TUBAL.—Vide in the map, lat. 50 to 60 : long. 60.
6. MESHECH.—Vide in the map, Muscovy : lat. 50 : long. 60 to 70.
7. TIRAS.—Vide in the map, lat. 44 : long. 40 to 50.

SONS OF GOMER.

1. ASHKENAZ.—Vide in the map, lat. 40 : long. 40 to 50.
2. RIPHATH.—Vide in the map, lat. 40 : long. 50.
3. TOGARMAH.—Vide in the map, lat. 40 : long. 50 to 60.

SONS OF JAVAN

1. ELISHA.—Vide in the map, lat. 40 : long. 40 to 50.
2. TARSHISH.—Vide in the map, lat. 37 : long. 50 to 60.
3. KITTIM.—Vide in the map, lat. 40 : long. 30 to 50.
4. DODANIM.—Vide in the map, lat. 37 : long. 40 to 50.

SONS OF HAM.

1. CUSH.—Vide in the map : 1. In Armenia, lat. 40 : long. 70.—2. In Arabia, lat. 20 to 30 : long. 50 to 60.—3. In Ethiopia, lat. 10 to 20 : long. 50 to 60. N. B. It is probable a tribe of *Cushites* was originally situated still more easterly than the above countries ; perhaps even in eastern Bactria.
2. MIZRAIM.—Vide in the map, lat. 20 to 30 : long. 40 to 50 ; Egypt.

3. PHUT.—Vide in the map, lat. 30 : long. 20 to 30.
4. CANAAN.—Vide in the map, lat. 30 to 40 : long. 50 to 60.

SONS OF CUSH.

1. SABA.—*Meroë in Lower Egypt ; or Saba in Arabia.*
2. HAVILAH.—Vide in the map, lat. 20 to 30 : long. 60 to 70.
3. SABTAH.—*Arabia Felix.*
4. RAAMAH.—*Arabia Felix.*
5. SABTECHAH.—*Arabia Felix.*

SONS OF RAAMAH.

1. SHABA.—*Probably Arabia Felix.*
2. DADAN.—*Probably Arabia Felix.*

SONS OF MIZRAIM.

1. LUDIM.—Vide in the map, lat. 10 to 20 : long. 40 to 50.
2. ANAMIM.—
3. LEHABIM.—Vide map, lat. 30 : long. 30 to 40.
4. NAPHTUHIM.—Vide in the map, lat. 30 : long. 40 to 50.
5. PATHRUSIM.—Vide map, Pathros : lat. 20 to 30 : long. 50.
6. CASLUHIM.—Vide in the map, lat. 20 to 30 : long. 50 to 60.
7. CAPHTORIM.—

SONS OF SHEM.

1. ELAM.—Vide map, lat. 30 : long. 70 to 80.
2. ASHUR.—Vide in the map, Babylonia : lat. 30 : long. 60 to 70.
3. ARPHAXAD.—Vide map.
4. LUD, Lydia.—Vide Asia Minor.
5. ARAM.—Syria.

N. B. *These longitudes are east from Ferro, not from London.*

CHAPTER XI. VERSE 2.

AND mankind journeyed from the EAST—from (קדם, *kedem*). Under the articles *East* and *Kedem*, in CALMET, may be seen the embarrassment which this word has given to those who suppose Mount Ararat of Armenia, to be the place where the ark rested after the deluge ; for Armenia is direct north of Babylonia, so that the writer, if he meant that mountain, should rather have said, Mankind journeyed *from the north*. But, if we accept the idea, that the ark lodged on the mountains of Caucasus of Captain WILFORD (for which, vide our map of PARADISE) then it will appear, that they journeyed strictly *from the east* ; and this expression will contribute to confirm the statement derived by the Captain from the *Hindoo Puranas*.

There

There is, however, another acceptance of the word *East*—that it signifies a specific country, or province: and this sense, in effect, will coincide with the other, since the present *Bahkter* signifies “the east,” and since the ancient *Bactria*, or *Bactriana*, was the easternmost province of the Persian empire: but we must not consider this province as having been the same at all times: in our Map of the World it is marked according to another division, east of the Caspian sea, but north-east of Babylon. This province originally included parts much more south and east; so that the city *Balk* or *Bactria*, was a part of it, perhaps even might give name to it—*q. d. Balktria, Balktriana*.

Now it reigns as an uncontradicted tradition in the east, that Abraham *originally* dwelt at *Balk*; and if this be the proper import of the word *Kedem*, “east,” then Scripture seems to say the same. In Isaiah xli. 2. we have an allusion to the original country of this patriarch, “who raised up the righteous man (Abraham) from the east,” [where, however, the word is not *Kedem*, but *Metzrah*, which denotes *the sun-rising*] and the same is said of Cyrus’s coming against Babylon, “calling a ravenous bird from the east,” Isaiah xlii. 11. The east here cannot possibly mean Mesopotamia, since that lies *north-west* of Babylon, whereas Media (Cyrus was a Mede) lies east; and it appears by Major RENNEL’s map, in his Herodotus, that not only Media but Bactriana also, lies east of Babylon; and we know that Cyrus subdued these provinces before he attacked Babylon, and he advanced to attack that city direct from these parts, where he had conducted the war in person; so that he flew, as it were, as straight as a ravenous bird flies, from the east to Babylon. If it be supposable that the provinces known in very early ages by the name of *Kedem*, “the east,” were afterwards known by another word denoting “the east,” as they now are by the name *Bactria*, which also denotes “the east;” then the idea that this very country is the place from whence this portion of mankind journeyed, would be rendered still more probable. The scholar who recollects the use of the Greek word *Anatolia*, will perhaps find a parallel in that region and province, to this article.

TOWER OF BABEL.

On the subject of “brick instead of stone, and slime (bitumen) instead of mortar,” see our plate and remarks “on Early Writing.” It should appear, that though the *great* design of these builders was defeated, yet the tower was raised to a certain height at this time; probably it was afterwards ornamented, and various enrichments and finishings were bestowed on it by Nebuchadnezzar; but whether it was raised in height may, perhaps, be doubted. The height of this tower, as described by ancient authors, was about 500 feet. The great pyramid of Egypt is about 480, which is 20 feet

less than the tower; but allowance must be made for what part of it is buried in the sand. The steeple of old St. Paul’s Church was 534 feet in height; the height of the present St. Paul’s is but 340 feet; Salisbury steeple is now the highest in Britain, and is about 400 feet. These comparative measures may serve to shew, that although the Tower of Babel was of great magnitude and height, yet that other buildings have been raised *up to heaven*, as the Hebrews speak; at least to equal altitude with this famous edifice.

CHAPTER XII. VERSE 16.

ABRAHAM’S RICHES.

ABRAHAM had SHEEP, and OXEN, and HE-ASSES, and MEN-SERVANTS, and MAID-SERVANTS, and SHE-ASSES, and CAMELS.

These riches, these flocks and herds, imply the pastoral life of this patriarch; not gold and silver, the profits obtained by commerce, but the increase of the herd, and of the fold.

The word (שׁוֹן תְּיָאֵן) rendered *sheep*, includes both the goat kind, and the sheep kind: It denotes also a flock of either kind.

The word (בָּקָר, *BAKAR*) rendered *oxen*, has also an extended signification, and implies sometimes a herd of cattle; so calves are called “sons of the herd,” (*beni bakar*) 1 Sam. xiv. 32.

The word for *ass* is (חֲמֹר) *CHAMOR*. In the east the ass is not so grey in colour as among ourselves, but is redder; the Arabic *chamara* signifies *to be red*: but the word rendered *she-asses* is (אֲתוֹנוֹת) *ATONOTH*, which apparently signifies *fiery*; these must have been of a different species from the former, to be described by a word so different. Were they so called from any line of descent?—from being pye-balled?—from being painted?—or were their ancestors of a race dedicated to the deity Fire? Though the word is feminine, they could hardly be females only; nor could the sex of these animals merely be intended by the word. NIEBUHR says, (Fr. Edit. 2to. p. 144) “two kinds of asses are found in Arabia. The small and lazy are as little esteemed in the east as they are in Europe. But there is one kind, which is large, and full of courage, which appeared to me more convenient for travelling on than horses, and which is very dear in price.” Are these the *Atonoth* of this passage? Might the Hebrews call a horse of mettle—*fiery*?—and so of asses, might they describe an ass full of courage, as full of fire?—whence *Atonoth*, bold, hardy, spirited, *fiery*.

The camel (גַּמֶּל, *GAMEL*). This is the regular word to denote this creature, of which there are several races: also it bears several names, according to its age, &c.

CHAPTER XV. VERSE 9.

ABRAHAM'S SACRIFICE.

TAKE a heifer of three years old, and a she-goat of three years old, and a ram of three years old, and a turtle dove, and a young pigeon.

There are great difficulties here to determine the true import of these words: some read, *three* heifers of one year old; others, cut into *three* parts each; others, a heifer of the *third* birth; *i. e.* the third offspring of its parent: the LXX. δαμαλιν τριετιζουσιν: Jerom, *Vitulam triennem*; with which our version agrees; supposing, no doubt, that these animals are described as being at the prime time of life, at the most valuable period of their age; vide Hosea x. 11, and Virgil, Eccl. 3. The other words in this passage, are such as usually denote the animals by which they are translated.

And when the fowls came down upon the carcasses, Abraham drove them away. Others read, "Abraham sat down by the carcasses." This attitude of Abraham was an attitude of attendance, like a servant on his master; like David before the Lord, [vide plate of EASTERN ATTITUDES, fig. H.] 2 Sam. vii. 18. So that Abraham waited in this reverential manner till evening; and as the shades of evening obscured all around, the light which visited these sacrifices became more observable, more clear and resplendent.

To an agreement of importance, the passing of the parties between the parts of a sacrifice, was the ancient way of confirming a covenant. [Vide FRAGMENT, on Covenants, No cxxix]. And, probably, as Abraham had put no fire to his sacrifices to consume them, they were consumed by this flame, which was to him an unequivocal token of supernatural interference and acceptance on this occasion, [vide the instance of Elijah] since they would not *naturally* have generated flame.

We are to consider Abraham as first *sitting* reverentially beside his sacrifice; then as falling down in a kind of prophetic trance; for which vide Adam, Gen. ii. 21. During this trance the future circumstances of his posterity were revealed to him.

CHAPTER XIX. VERSE 24.

DESTRUCTION OF SODOM.

THE Lord rained upon Sodom and Gomorrah brimstone and fire from the Lord out of heaven.

Every thing no doubt is directed by the Divine Author of all things, and is originally from him; but I can by no means admit, that fire, in this instance, was *rained from the Lord*, from the celestial heaven. We know that the word *heaven* often means the air, or atmosphere, and such it may be presumed is its import in this passage.

Lightning may be called "fire from heaven" with evident propriety, as it is in Scripture; but lightning can hardly be said to be *rained*. It might, however, be the beginning of those meteors which overthrew these cities; yet it should seem from all present appearances, that a volcano was the immediate cause of their destruction. This would naturally be attended with prodigious lightnings, with earthquakes, and such violent risings of the earth, as would destroy all the dwellings and their inhabitants. As we do not know exactly whereabouts this volcano burst forth, we shall suppose that the previous state of this country was that of a number of islands; for we read that it was extremely well watered, Chap. xiii. 10. In the central island suppose this phenomenon to appear, and to discharge its masses of melted minerals, of fiery cinders and ashes around it; these would fall, strictly speaking, in a *rain of fire*; and having been first thrown up to an incalculable height in the air, they might be said to be *rained from heaven*—*i. e.* the atmosphere, without even employing the *amplitude* of eastern phraseology. This eruption of fire first raised these islands; but when it ceased they sank below their former level; and the stream of the Jordan flowing over them, covered the whole surface with a body of water, now the Dead Sea. It is a mass of water impregnated with bitumenous salts, so strongly, that nothing flourishes near it, nor can it support animal life. The volcanic matters which are found in it, and around it, all testify that here has been an eruption of fire; and we are beholden to the sacred writings for informing us at what period that eruption happened. All travellers agree in this; but I shall quote from VOLNEY, Vol. I. p. 303.—"The hollow through which the Jordan flows, is a country of volcanos; the bitumenous and sulphureous sources of the lake Asphaltites, the lava, the pumice stones, thrown on its banks, and the hot-bath of Tabaria, demonstrate that this valley has been the seat of a subterraneous fire, *which is not yet extinguished*. [compare Jude 7.] Clouds of smoke are often observed to issue from the lake, and new crevices to be formed on its banks. Strabo expressly says, lib. xvi. that the tradition of the inhabitants of the country was, that formerly the valley of the lake was peopled by thirteen flourishing cities, and that they were swallowed up by a volcano. Earthquakes which usually succeed these eruptions are still felt in this country.

VERSES 25, 26.

LOT'S WIFE.

She looked back behind HIM, says the Hebrew, and our version; others read, behind *her*; both may be true. It should even seem, that she was punished in the very act of returning; whence the caution,

caution, Luke xvii. 32. "Let him not return back.—Remember Lot's wife."

Of what nature was the *salt* into which Lot's wife was changed? Salt is taken sometimes symbolically, sometimes metaphorically; so for incorruptibility, "a covenant of salt," Numb. xviii. 19; so for sterility, Deut. xxix. 23. Psalm cvii. 34.

Of what nature was the *pillar* into which Lot's wife was changed? This is full as interesting a question as the other, and indeed the answer to this may lead us to answer the other.

The word (נִצִּיב, NETJIB) rendered *pillar*, is used to signify an erect attitude; a standing still; a *FIXURE*. So Gen. xviii. 2. "Abraham lifted up his eyes, and lo three men *stood*—they were fixed in the place where they were, as if in deep conversation, &c.—they were so engaged as to be immoveable—therefore Abraham ran to them." So Gen. xxxvii. 7. My sheaf arose, and *stood upright*, like a man of quality, receiving homage, inflexible, immoveable. And what is more to our purpose, Exod. xv. 8. "the floods *stood upright as a heap*:" the word then does not signify a regular, well finished statue, but a heap, an upright stock, a motionless fixture; as we say to a person, "you stand like a post." Such an erection did Jacob station, when he took the stone which had served for his pillow, and set it up for a pillar, or monument; certainly not fashioned into the human or any other studied form, but, rough as it was in its natural state.

As to the cause of the privation of life from this woman, and her conversion into an inert mass, we learn from Deut. xxix. 23. that "the whole land is brimstone, and *salt of burning*; it is not sown, nor bears, nor any herbs grow therein: *like the overthrow of Sodom, &c.*" By the *brimstone* here mentioned, we understand the sulphuric and fatal vapours, which always attend volcanic eruptions, as well as mineral brimstone itself. Lot's wife has not been the only person who has suffered by proximity to volcanic effluvia; witness the history of the death of the elder *Pliny*, at Vesuvius, related in the younger *Pliny's* Letters. But Moses says, *salt of burning* formed one of the agents in the overthrow of Sodom; this, I presume, is what we now call *asphaltum*, because, being a bitumen it might be ranged by the Hebrews among salts; (as it is by other ancient writers: hence Herodotus speaks of *salt* burning in a lamp). As *asphaltum* is very inflammable, it justly bears the epithet of *burning*, or *fiery*. And this is the accurate character of the place to this day; *asphaltum* being found on the Dead Sea, or Sea of Sodom. On the whole, then, we infer that Lot's wife, delaying her flight, and too slowly quitting the scene of devastation, was surprised by a shower of bitumen, or sulphur, falling upon her, and around her; amid which she

stood erect, motionless, deprived of life; and formed the center or *nucleus*, for a mass which gathered around her, and which becoming hard and permanent as it cooled, was well known as the *monument* and fixed station of this unhappy woman.

CHAPTER XXVIII. VERSES 18, 19.

JACOB'S STONE ERECTED AT BETHEL.

Vide our Plate of "GILGAL."

THE rabbins hold this stone in great veneration, and have many stories in relation to it, sufficiently fantastical; but, probably, their meaning is symbolical—the true religion.

The word *Beth-el* seems to have been the parent of the *Bethulia* or *Bethylia* among the heathen: they are mentioned by Sanchoniatho, Photius, Hesychius, and Pliny, lib. xxxvii. cap. 9. For the idea of sanctity connected with these stones, vide the Illustrations of our plate of GILGAL.

CHAPTER XXX. VERSE 14.

DUDAIM, MANDRAKES. Vide what has been adduced on Solomon's Song, in the FRAGMENTS to CALMET.

VERSES 32, 33.

JACOB'S MANAGEMENT OF HIS SHEEP.

The first thing noticeable in this history is, the distinction formed by the *colours* of these animals: We have formerly remarked, that (תָּאֵן) TJAAN, signifies sheep and goats; as (כֶּשֶׂם) SHEM does kids and lambs. Now these are described as (נִקְרָא) NAKOD) *spotted; punctis respersa*, SMALL SPOTS: but (טָלָה) thalu, signifies LARGE SPOTS, and might well be rendered *pye-balled; maculis variegatae*.

The rods of Jacob are the second thing observable. Some think this notion was suggested to him miraculously; others think it was the result of his own reflection; perhaps, many notions may be suggested to us, which we never distinguish from our own reflections: but this subject is too deep for us.

The *application* of these rods is perfectly natural, and their influence on the sheep, &c. is analogous to some of the principles of our own breeders of animals, as well as to the skill of our gardeners, in blotting out, &c. colours from flowers, as tulips, &c.

There is an art, which, in their piedness, shares
With great creating Nature.—

Yet Nature is made better by no mean,

But Nature makes that mean:—

The art itself is nature.

Winter's Tale.

But, together with a knowledge of natural causes in the patriarch, must undoubtedly be united the divine blessing; and we believe, that the divine blessing

blessing in similar events seldom offers violence to natural causes, which are its own appointments.

A third thing observable in this history is, the species of woods employed by Jacob, which are,

1. *Lebanah*, לבנה, the WHITE-poplar, as is generally supposed; so the Vulgate renders; but the lxx. and *Aquila*, λευκη, "the white,"—implying the poplar: and our acquaintance with the trees of the east is too small to controvert their renderings.

2. *Luz*, לוז, the almond tree, as is generally thought: and the name of this tree in Arabic is, *luzah*; but others say, the nut-tree.

3. *Ormun*, ערמון. The lxx. read *platanos*; Vulgate, *plane*: *Onkelos* reads *dulb*, which is the Arabic name of the *platanus*. This word is found in *Stephens*, and in the *Pandects of Medicine*.

The reader will judge from hence, that our translators have mentioned such British trees as they thought proper; we still want *eastern* information.

CHAPTER XXXII. VERSE 1.

JACOB went on his way, and the ANGELS OF GOD met him, &c.

Dr. GEDDES finds so much difficulty in this passage, (as do some others) that he supposes it happened in vision; yet even so he cannot account for it. It must be owned, that we see no reason why the angels of God met Jacob: no instance of their interference is mentioned. But if we take the word *angels* in some of those senses which are marked in the ADDITIONS to the article *Angels* in CALMET, perhaps we may obtain a glimpse of a sense which removes all difficulties. I shall mention a very different version of the passage; (*mentioning* is not *recommending*) which may assist the thoughts of some future enquirer into this matter. It seems to be applicable to the preceding and subsequent parts of the history; but the words are taken in a sense not very common, though possibly it is *just*.

Laban departed, and Jacob went on his way, and there met him—there occurred to him—there lighted upon him—in a bad sense, to his hurt, in this very place, sundry agents sent from God, i. e. evils of divine providence—as, first, that of Laban, recently noticed; secondly, that of which he stood in great fear, as Esau, of whose approach, with 400 men, he here received the news. But, said Jacob, when he perceived the approach of these difficulties, these evils,—this—my family—my property—my concerns—this is the camp of God: I am secure under divine protection; and, as he here divided his family, &c. into two parties; he

called the name of that place, "the camps." (Mahanaim).

VERSE 15.

Jacob's present to Esau is noticeable on account of the proportion he observes between the cattle, respecting the individuals of the sexes.

It leads us also to consider the names for cattle, פָּר, PAR, the bull; פָּרָה, parah, the cow; for it appears by Psalm lxxix, 32, that *par* is more than a bull-calf, as it is described with horns. *Parah*, in Job xxi. 10, is taken for a cow which suckles her calf: nevertheless, *par* is frequently named, "the son of a bull;" and *parah* seems to be a heifer, which has not had young, nor been trained in the yoke. Numb. xix. 2. The *she-asses* of this present are the *atonoth* of Gen. xii. 16. already noticed.

CHAPTER XXXVI. VERSE 24.

THIS Ana found the MULES in the wilderness, as he fed the asses of Zibeon his father.

More probably these *mules* were fountains of salutary streams, or *hot waters*, as the Vulgate reads; the Syriac says, *waters in the desert*; Diodorus of Tarsus, *fountains in the desert*; but others think, a people is meant, whom *Anah* attacked and discomfited, for which valiant exploit he became renowned.

Nevertheless, if *Anah* was the father of the *Heneti*, as several have supposed, then our version bids fair to be correct. These people first bred mules, as Strabo, Theophrastus, and Plutarch, mention: and thus the Scholiast on Homer, Iliad ii. v. 852. says, speaking of the *Heneti*, "this is the first country where was invented and found, originally, the breed of mules;" or rather the *breeding* of mules, for mules do not breed. But, is the mule, the mixed offspring of a horse and an ass, *truly* meant here? We are told that Ana kept his father's asses; but not a word of horses, or mares, which are absolutely indispensable in producing mules.

CHAPTER XXXVII. VERSE 25.

A Company of Ishmeelites bearing SPICERY, and BALM, and MYRRH, going to Egypt.

Spicery, NECOTH, this word is found also in Gen. xliii. 11. but its signification is uncertain. The paraphrast Jonathan, the Arabic version of Erpenius, and Bereshith Rabba, sect. 91, render it *wax*. The lxx. render it *perfumes*; *Aquila* says, *storax*. Jerom puts in the first place *aromatics*; in the second *storax*. The Syriac version puts *resin*; Kimchi, *a desirable thing*; Jarchi, *a composition of aromatics*. Bochart supports his opinion, that this word signifies *storax*, by observing, 1. That this drug



drug is abundant in Syria, according to Pliny, lib. xii. cap. 25, from whence it is even now brought to Marseilles, and distributed throughout Europe. Artemidorus (*apud Stephanum* in *καρυ*) says, it abounds in Phenicia; Josephus, lib. xv. cap. 23, says, in Galilee. 2. It is among the most famous aromatics. 3. Pliny says, "The Arabs collect the storax, which they burn in their houses to correct ill smells." 4. Moses joins with this *necoth*, resin, honey, and myrrh; which agree with the nature of the storax. The *resin* of the Syriac translators, and the *gum* of the Arabic, coincide with this sentiment.

Hillerus, who came after Bochart, rejects all the reasons above assigned, and affirms, that (נכות) *necuth*, is the same as *necututh*, which signifies *pounded, pressed*; and that the word ought to be understood of *olive oil pressed*; or what is called *virgin oil*; "pure olive oil beaten," Exod. xxvii. 20. Lev. xxiv. 2. Numb. xxviii. 5. Virgin oil is that which is procured from the fresh olives, pressed in a mill constructed on purpose; it is of a beautiful yellow colour, sweet, and of good smell. This idea agrees with all other places where (בכות) *becuth*, or (נכות) *necuath*, occurs; because Egypt stood in need of the best and purest oil to compose its essences and perfumes, which were made up as unguents. Now it is certain, that the country of Gilead furnished the most valuable oils; Gen. xliii. 11; Deut. viii. 8; 2 Kings xx. 13. Isaiah xxxix. 2. In short, the present sent by Jacob to the Governor of Egypt, was by no means an ordinary present; since kings shewed their liberality and magnificence in sending oils to each other, 1 Kings v. 11; 2 Chron. ii. 10. [Vide Ezra iii. 7. Ezek. xxvii. 17]. But there seems to be a text still stronger: Hosea xii. 1. *They make a covenant with the Assyrians; and oil is carried into Egypt*: no doubt to procure favour, with the same design as that of covenanting with the Assyrians. Now, this was the very wish of Jacob in sending *necoth* to Joseph. But still this difficulty occurs, why is this word used here to denote what elsewhere is called *oil*? Might it be oil not only of a prime kind, but impregnated with aromatics, &c. or, the *ottar*; i. e. essential oil, of certain plants, or flowers. This unites the sense of several of the ancient renderings.

BALM. This drug is also mentioned, Jer. viii. 22; xlv. 11. The Targum of Onkelos, the Vulgate, and others, say simply *resin*. To consider it as the famous balsam, known in the present day as the balsam of Mecca, is to contradict Josephus, who says the first sprig of that tree, was brought to Solomon by the Queen of Sheba. *Antiq.* lib. viii. cap. 2. but vide BRUCE'S Travels, Vol. V.

MYRRH, or *stacte*, is the purest and most valuable kind of myrrh; according to *Dioscorides*, lib. i. cap. 74; Pliny, lib. xxii. cap. 15.

CHAPTER XLI. VERSE 5, &c.

PHAROAH'S DREAMS.

THE first dream of Pharoah is, that of *seven ears of corn, growing from one stem*: according to the nature of certain of the Egyptian wheats. [Vide FRAGMENTS, No. cxlvii. and Plate]. Here, observe the correspondence, *first*, of the number of the mouths of the Nile—*seven*—to the number of ears of corn—*seven*, also: *secondly*, of the figure of these seven ears, spreading from one stem, as the Nile divides into seven branches, from one stream. Compare the course of the Nile in a map of Egypt, to the figure of the Egyptian wheat on our plate. This infers, 1. That the Nile had, or was reputed to have, seven mouths for discharge of its waters, so early as the days of Joseph. 2. That maps *might* be then known in Egypt, though it has been supposed the earliest we read of is in the days of Moses and Joshua. So far it should seem is clear. But it may be queried further, whether the Egyptians in their symbols might not denote the ploughing season by a bullock? (that animal being always employed in the labour of ploughing).—If so, the coming of these bullocks out of the river, whose overflow caused the fertility of Egypt, would signify so many ploughing seasons, influenced by so many good, or by so many bad, overflowings of the river.

Moreover, these ploughing seasons occurring but at a fixed time in the year, determined beyond evasion, by the increase and decrease of the waters of the Nile, would imply an equal number of *years*. It may be observed, that a variety of esculents are raised in a much shorter time, as in a month, or two months; and several harvests of productions of a like nature, may be raised in the course of a year; but the symbol of ploughing cattle, excluded these minor productions; and distinctly inferred *corn*: an annual harvest, to which an indispensable preparation was the tillage of the land by the plough, after the overflowing of the river had subsided.

The east wind (קדים, KADIM) is usually mentioned in Scripture as a burning, scorching, sultry wind, Exod. xiv. 21. xvii. 10. xix. 12; Hosea xiii. 15. Perhaps, however, this wind might partake of a southern direction, and it is probably the *campsin* of the Egyptians, to which the Sirocco wind of the modern Italians is allied. *Alpinus* thus describes it, *Medic. Egypt.* lib. 1. cap. 7.—"The winds of east and south are named *campsin*: passing over sandy deserts extremely heated, they blow in Egypt, where they cause such an insupportable heat, and bring with them such a quantity of dust and burning sand, that it might be thought they were thick clouds, and actual flames. This dust and sand brought by the wind, united with that which rises from Egypt itself, being agitated in the air,

air, injures and lacerates what it happens to meet with, no less by its impulse, than by its heat; but especially it is very dangerous to the eyes, on which it produces soreness and inflammation. These winds blow by intervals, and without regularity; sometimes during three days, sometimes five, sometimes seven or nine days. I have remarked that while they blow, pestilential and phrenetic fevers reign, and carry off the patients, not in a few days, but a few hours. I have also remarked many ophthalmies, and inflammations of the eyes. The persons attacked with these maladies become debilitated, and are tormented with inextinguishable thirst; but look on food with dislike, and even a kind of horror."

CHAPTER XLIII. VERSE 11.

TAKE of the best fruits of the land, BALM, HONEY, SPICES, MYRRH, NUTS, and ALMONDS.

The best of the land; Heb. "the praise of the land:" this phrase is very expressive. For *balm*, *spices*, and *myrrh*, vide chap. xxxvii. 25.

HONEY was formerly the only sweetener in use (like our sugar); its value consequently was then greater than it is now: it was also a delicacy. Vide Cant. v. 11. When *Hecamedes* treated *Nestor* and *Patroclus*, he offered them μέλι χλωρόν, yellow honey, fresh honey, Iliad x. v. 630. Suetonius, in his Life of Nero, cap. 27. reports, "that he would be entertained in the houses of his best friends; and that at one of these repasts, the cost of pastry prepared with honey, was a hundred and twenty thousand crowns;" as Budeus has translated the passage. Judea was famous for honey, and for excellent honey: it was sent to Tyre, Ezek. xxvii. 17.

BATHENIM, (בַּתְנִים) is variously rendered by translators. The lxx render *turpentine*. Onkelos, the Syriac, and the Arabic, not understanding it, have left it untranslated. Some think it means *peaches*, others say *nuts*. Two towns seem to have been named from this fruit, Josh. xiii. 26. xix. 25. It is not easy to ascertain this fruit. There is a species of *Terebinthus* which bears a kind of small nut, by some preferred to the pistachio; and some think it superior to the almond. *Theophrast.* iv. Hist. 5. The name of this kind of *Terebinthus* is in Arabic *beten*, which has considerable resemblance to the Hebrew word.

The *Bethen* of this passage is, probably, the *pistachio nut*, so called from its belly-like form, as the word signifies. BOCHART was of this opinion, and so was Dr. SHAW. Travels, p. 145, note, 4to. edition. And, upon the whole, this seems the best supported.

CHAPTER XLIX. VERSE 3.

REUBEN—*unstable, as water*—rather *unconfined, licentious*—not to be restrained by bounds and banks, but overflowing all restrictions;—"impetuous as a deluge, or a cataract."

Perhaps the correct import of this term is best expressed by our English word *Dissolute*. Water mixed with earth, &c. *dissolves* it, as it were, into mud. And when we describe a person as dissolute we mean one who *dissolves* the regular and established bonds, and affinities of society. This was evidently the case between Jacob and Reuben. For this dissolute conduct, the eldest son was punished, by the loss of his birthright privileges.

VERSE 6.

SIMEON and **LEVI**, are brethren—associates—*fellows*: in their self-will they *digged down a wall*. Many read, they slew a bullock; i. e. a prince, meaning the prince of Shechem, chap. xxxiv. 26. Whether this town was *walled*, and if it were, by what occasion the sons of Jacob were impelled, to overthrow that wall does not appear; but that they slew the prince is recorded: and this sense of the place depends on the pronunciation of the word שׁוֹר, *Shor*, or *Shur*, which may as well be pronounced to this sense as to the other. It would be a curious instance of the mutation of S and T, in this early age, if, though written *Shur*, this word were pronounced *Taur*; as in Syriac, afterwards.

VERSES 11, 12.

JUDAH is a LION'S WHELP—as a LION—as an OLD LION, &c.

LION.—This animal is well known among us. Observe, the progress of the patriarch's comparison of his son to this species of creature. Judah is a *lion's whelp* or *CUB*: the word (נֹר, GUR) is so used, Deut. xxxiii. 22; Jer. li. 38; Ezek. xix. 2; Nah. ii. 13. This word also signifies, the *cub* or *whelp* of other kinds of animals, as bears, dogs, and even seals, Lam. iv. 3. *From devouring the prey, my son, thou art gone up: he stooped down, he couched like* (אֲרִי, ARI, or ARIEH) *a lion*, about to spring upon his prey, and tear it to pieces: no longer a whelp, but able to provide for himself by his activity: *and like* (לֶאֱבִיָּא, LABIA,) *a lioness*; not an *old* lion, which gives an idea of decrepitude, but a *lioness*, having whelps;—then most fierce and most active;—who shall *then* break into her den?—who shall rouse her *then*? Here are two actions of these creatures: the *Ariah* leaps on his prey; but the *Labiah* defends her young. The *lioness* is also more fierce than the lion; and especially when her young are in danger. *Eliau*, Hist. lib. xii. cap. 39, calls the lion a very strong, and even invincible animal: he also reports, that *Semiramis*, after having killed a panther, a lion, or other wild beast, was not greatly elated: but when

when she had killed a *lioness* she was very proud of her prowess. She had reason; for among both birds and beasts of prey, the female is uniformly stronger than the male.

Binding his foal to the vine, i. e. the foal of his ass; and *his ass's colt*, rather, his she-ass, to the *choice vine*. Our translation loses the grace of this passage, by rendering "*foal*" and "*colt*," which are the same in import; whereas, the first word properly signifies a *lively* young ass, the second a strong she-ass: and, moreover, of the race of those *Atonoth*, which we distinguished on chap. xii. 16. This greatly raises the climax of the poetry.

The Jewish explanation of this simile, is not without amusement. They say, the *foal of the ass* signifies the young persons of this tribe; the *she-ass*, the aged; the *vine*, the law; the *choice vine*, the synagogue; the *vestments washed in wine*, the princes of the tribes who wore garments of purple and scarlet; the *eyes red with wine*, the mountains, which yielded plentiful vintages; the *teeth whiter than milk*, the plains, &c. white with harvests, or with flocks and herds, which yielded milk! That Jews should adopt such sentiments as they supposed might dignify their nation, and its tribes, can occasion no wonder; but, their conduct should sometimes serve as warnings to Christian commentators.

The second part of this description of Judah, besides rising above the former in the species of ass which the patriarch mentions, (a species which has usually a distinguished place whenever mentioned,) no doubt imports a superior kind of vine, which is named *Sorek* in the original. I suspect that this kind of vine is less named from the place of its growth, (though such is the prevailing idea, and seems to be countenanced by Isaiah v. 2. Jer. ii. 21.) than as a distinct kind. Rabbi *Isaac Ben Geuth* thinks these grapes were of a kind which has no seeds, and etymology favours the idea; for in Arabic the word signifies, among other things, to emasculate, to *deprive*: as if these grapes were *deprived* of their seeds. I believe they are known to our grocers under the name of "*Sultana raisins*." These fruits, however, have generally a transparent membranous seed (though some are said to have actually none at all,) whereby, while they are chewed, no seed is discoverable to the taste or tongue: yet it is apparent when the grape is cut with a knife, and seed is sought for. NIEBUHR, Fr. Edit. p. 130. Whether this is the kind meant by the patriarch we cannot affirm. Nevertheless, as we partly suspect it, it may not be amiss to add the following information from LE BRUYN, vol. i. p. 226.

"In Persia they have ten or twelve sorts of grapes, which in general they call *Angoer*, though each sort has a name peculiar to itself. They have three or four sorts that are blue, some of them

round, others long, and all very large. They have also two or three sorts that are white, and some of them VERY SWEET, AND WITHOUT STONES. They have another sort, whose bunches are a promiscuous mixture of large and small grapes, different from all I had ever seen elsewhere. They dry them every year, and making them a kind of comfit, they put them into earthen pots, and send them to *Batavia*, and elsewhere. In this manner it is they do it: they pick and cull the grapes very nicely, and cover them over with dry rose-leaves in a stone-jug, which they then stop up so close, that no air can have admission; in this state they leave them for some days, after which they break the neck of the vessel and take out the rose-leaves, and separate all the grapes, which they put into another vessel; and being thoroughly dry, they send them into foreign parts. The rose-leaves are only intended to give a pleasant flavour to the grapes; but care must be taken that none of them remain with the grapes, for fear they should cause a rot. At the same time they send to the *Indies* almond and pistachios; from whence, in exchange, they receive sweetmeats and other dainties."

I would also remark on this extract, that we find dried fruits, or fruits prepared with art and attention, are sent to foreign parts, even *almonds* and *pistachio* nuts, as well as grapes: may this assist our notions of the present sent by Jacob to Joseph? which we have observed consisted of fruits, some of which we have thought were *almonds* and *pistachio* nuts.

VERSE 17.

DAN shall be a SERPENT (שׁוֹפָן, NACHASH,) in the way; an ADDER, (שֶׁפִּיפְחֹן, SHEPHIPHUN,) in the path.—Perhaps it may lead to a determination of these serpents, to notice where they are found: the NACHASH is in the way—any way—the high road; a road as well in an open country, as in a fertile land:—a going. The Shephiphon is, in the path way, a track, perhaps; [a foot-path, or bridle way, may explain the notion.] The Lxx. rather countenance this idea, by rendering *watching*, and the Samaritan, *lying in ambush*: but this is common to several kinds of serpents.

The species of this serpent has been variously conjectured: Onkelos says, an *asp*; the Jerusalem Paraphrase, and the Syriac say, a *basilisk*: some say a *cerastes*, others an *adder*. The Arabic version renders *Sepphon* and *Sapphon*, which imports a serpent marked black and white: whence it is conjectured to be the *Hæmorrhoids*, or *Hæmorrhoides*, mentioned by Aetius, tom. iv. 6, 3, 36; by Avicenna, tom. ii. 138. as spotted black and white. Solinus says, that he sucks the blood when he bites, even fatally. Bochart, Hier, p. 2. lib. iii. cap. 12. approves of the Vulgate rendering

Cerastes; which kind of serpent certainly hides itself in the sand, or in some hole of a road, according to Nicander, Ther. 262. The bite of this serpent is mortal, says Elian, lib. xvi. cap. 28. And it is very difficult to avoid its ambush; because, being the same colour as the sand, it may be trod upon unawares. Diod. lib. iii. cap. 128.

Bochart, however, thinks the *Hæmorrhœus* may be included in the term *Sephiphon*; for both serpents are the colour of sand: both have horns, and they are about the same length. They are also remarkable, in that they do not go strait forward, but waving from side to side, because their spinal column is rather cartilage than bone, from which particularity they are flexible, and, as it were, apparently *weakly*, or *lax*; whence some have derived their name from *Shapah*—lameness.

“These serpents have always been regarded as very cunning, as well in invading their enemies, as in seizing their prey: they have been named “the *INSIDIOUS*,” and it is pretended that they hide themselves in highways, and particularly in the ruts [or rather holes] in them, in order to attack travellers unawares.”

This is agreeable to what Nicander says, Ther. 262.

Εν δαμαθοῖσι

Ἡ καὶ αματροχίῃσι παρὰ τὴν ὁδόν.

Under the sand,
Or in some rut, along the public road.

The same poet also says, of those bitten by them,

*A piercing pain spreads upwards to the groin,
And the knees seizes.*

After all, we wish for better information on the nature of the serpents in the East. Hasselquist mentions an asp which he saw in Cyprus, of which it is said, 1. That its venom causes universal gangrene, which destroys a man in a few hours. 2. That the better to catch its prey, it assumes the colour of the earth whereon it happens to be. The same author mentions another species of *horned* serpent in Egypt.

I shall translate from the Count *De la Cépède's* Natural History of Serpents, a paragraph in his account of the *Cerastes*, p. 78—79. This serpent is about two feet in length. “The *Cerastes* supports hunger and thirst during a much longer time than other serpents; but is so greedy, that he throws himself with vehemence on the smallest kinds of birds and other animals which are his prey; and as, according to Belon, his skin is capable of distention, till his size is increased to double, it is not surprizing that he should swallow so considerable a quantity of food, at one time, that his digestion becoming extremely difficult, he

falls into a kind of torpitude, and deep sleep, during which he is easily killed.” [I suspect that this describes the character of the tribe of Dan exactly: as may be gathered from the later incidents of its history.]

VERSE 21.

NAPHTHALI. Vide the plate, and its explanation.

VERSES 22 to 26.

JOSEPH. For the simile of the bow, &c. Vide FRAGMENTS to CALMET, No. ccxxi. p. 105—107.

VERSE 27.

BENJAMIN shall raven as a WOLF: in the morning he shall devour the prey, and at night he shall divide the spoil.

The Hebrew name for a wolf ZAAB (זאב) is perhaps, derived from *Zeheb*, signifying golden, or yellow: which is the colour of some kinds of wolves,

The wolf is a very voracious animal. Horace and Ovid call him *rapax*, *raptor*. Oppian calls him *αρπακτηρ*, *plunderer*; and Philostratus in Apollonius, lib. ii. cap. 7. *always watching his prey*.

Evening wolves are mentioned, Jer. v. 6.; Hab. i. 8.; Zeph. iii. 3.; perhaps, beginning in the evening, chasing and feeding till morning.

It must be owned the order of the words rather imports that he shall chase and prey in the morning, and again at night, for the wolf does not prey in the day time, but at night he “sallies forth over the country, keeps peering round the villages, carries off such animals as are not under protection, attacks the sheep-folds, scratches up, and undermines the thresholds of the doors where they are housed, enters furious, and destroys all, before he fixes on, and carries off his prey! When these sallies fail he returns to the forests, pursues the smaller animals, goes regularly to work, follows by the scent, opens to the view, still keeps following, hopeless himself of overtaking the prey, but expecting that some other wolf will come to his assistance, and is then content to share the spoil with his associate.” So says BUFFON. The present order of the words in our text has been suspected by others. Mr. Green was for transposing the two periods; and the Syriac translator was led to nearly the same order.

It is likely, that beside those wolves which seek for prey *singly*, some may hunt two or more together, and some may hunt in troops: *Benjamin's* partition of his prey leads to such kinds, if such be the character of Eastern wolves. The tribe of Benjamin was certainly warlike; and that the Benjaminites were cunning also, the sacred history proves in a variety of passages.—Is the evening wolf, the *black* wolf?

AN
EXPOSITORY INDEX

TO THE BOOK OF

EXODUS,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER III. VERSE 2.

THE BURNING BUSH.

THIS bush is called in the Hebrew *Senah*: and the number of these bushes in this place, seems to have given name to the mountain *Sinai*.

Whether it means any particular kind of *thorny* bush (for such is the import of the word) or a bush in general, seems to be uncertain.

As to the nature of the fire which burned in this bush, much might be said: Possibly, it was the *Shekinah*, or usual token of the divine presence; and if so, it may lead us to think, whether the *Shekinah* were not of a very mild and gentle, though luminous appearance. How far any natural meteors, or those now produced by electricity, may resemble that mark of the divine presence, we cannot presume to say.

CHAPTER IV. VERSES 3, 4.

AND Moses cast his rod on the ground, and it became a SERPENT.

This *serpent* which the rod of Moses became, is called in the original *Nachash*: but in chap. vii. 9. it is said, the rod (which some have understood to be that of Moses) was changed into a *Tannin*. This seems to militate against our idea, that *Tannin* signified, not a serpent, but *Amphibia*.

We ought however, to observe, that in chap. vii. 9, 10. it is the rod of Aaron, not of Moses, which is mentioned; but were it even the same rod as here, unless it could be proved that this rod was more easily convertible into one creature than into another, the argument would be inconclusive. It is probable, that the miracle consisted in enduing with life a dry stick from a tree: yet that on the mountain it was not turned into an animal proper to the waters, but into a serpent proper to a mountain; as Aaron's rod was not turned into a mountain serpent, but into a creature which the Egyptians were well acquainted with, &c. i. e. a water animal.

As to the change of the hand of Moses from a healthy into a leprous and diseased state. I shall

only observe on it, that being his own personal suffering, his *feelings* must have thoroughly convinced him that the effect was no deception; it could be neither a juggling trick nor a mistake.

ON THE MIRACLES PERFORMED
IN EGYPT.

It has long been a famous question, whether the Egyptian magicians imitated the miracles performed by Aaron, so far as they did imitate them, by means of juggling tricks, or of diabolical assistance? Juggling tricks may be taken in this instance, for a kind of natural magic—that is to say, the effect of a superior knowledge of nature, and natural powers, united, no doubt, with great dexterity of management in the performance of them. To acquire some grounds for deciding this question, it is proper to enquire, in the first place, what was the nature of these miracles.

MIRACLES REFERRING TO THE WATER.

1. *The rod of Aaron turned into a Tannin.* [N. B. this is different from the rod of Moses, chap. iv. 3.; moreover, the rod of Moses was turned into a *Nachash*.] This was imitated by the Egyptians, whose rods became *Tannin*—"lengthened fresh-water reptiles." Now, unless we know precisely the species of this reptile, we are unable to determine whether it might be scarce or plentiful in Egypt; if plentiful, then we may suppose, for the present, that this was a *substitution* rather than a *metamorphosis*, on the part of these magicians.

2. *The conversion of the waters into blood.* There is nothing, I apprehend, contrary to possibility, in supposing, that the Egyptians might so change the colour and appearance of water by mixture, as to deceive the eyes of spectators, or might even substitute a red liquor which might pass for blood: not to insist that they might procure and produce the very blood of animals.

3. *Multiplication of frogs.* These animals, no doubt, came up from the waters, where they were bred, and where they had hitherto remained: this miracle the Egyptians imitated.

The sacred story relates, that the frogs and the blood came from the water—the fresh water of the Nile; may we not add, that the *tanin* also into

which the rods of Aaron, &c. were changed, had relation to this element? if so, then these three miracles refer to the water, and to such productions of the Nile as the Egyptians were well acquainted with, and of whose properties they were perfectly informed: these miracles they imitated; but the following miracles, those referring to the air they could not imitate.

MIRACLES REFERRING TO THE AIR.

4. The next in order is, that of *converting the dust of the earth into GNATS, or lice*; if they were *gnats*, then the seat of this miracle was the air, wherein those animals flew about, and visited both man and beast; indeed, if they were *lice*, it is scarcely credible that they *crawled* toward their subject; they must have made more rapid approaches.

5. *The swarm of flies*; the dog-fly, or *Zimb*: this also referred to the air.

6. *The mortality among the beasts*; this was probably, analogous to what we read, of distempers among the horned cattle in Europe; therefore, by the same analogy, its seat was in the air.

7. *The boil, on man and beast*; probably of the same nature, so far as to be communicated by the atmosphere.

8. *Hail, Lightning, &c.* evidently meteors, of which the seat is in the atmosphere.

9. *Locusts*: referred to the air, on the principles above mentioned in reference to the *Gnats* and the *Zimb*.

10. *Darkness*. This also was seated in the air.

Now, since those miracles, of which the effects required a change in the nature, temperature, &c. of the atmosphere, or of which the atmosphere was the vehicle of conveyance, could not be imitated by the Egyptians while they could imitate those derived from the water, I think it proves that sleight of hand had a much greater share than diabolical agency in their performances: since the devil is described as "prince of the powers of the air," and since no reason can be given for his impotence in effects depending on the atmosphere, or any of its properties.

Did all these miracles occur in *rapid* succession? Some have thought they did; and that a month or two was enough for the whole. I rather think the intervals between them might be somewhat more distant; and perhaps, we might suppose them to be distributed throughout a year, or thereabouts, without offence.

We have elsewhere given our reasons for supposing that the *Egypt* of these passages was a city, not a country: the capital of the kingdom. This accounts for the ready visits of Moses to Pharaoh, and the ready communication of that prince's orders to the chiefs of Israel. Had they been many miles asunder, this intercourse could not have taken

place, as we are told it did, in the course of a few hours, and sometimes in the same day, or in the same night.

I presume too, we are to consider a part of the population of Israel, as dwelling in the royal city, while the remainder was further distant in their cantonments, with their flocks and herds, &c.

CHAPTER VII. VERSE 9, 12.

AARON cast down his rod before Pharaoh, and before his servants, and it became a SERPENT.

We are told that the rod of Aaron was changed into a *Tanin*, which we take to be a water animal, not a serpent; we may find this word again in our progress, and shall note its application.

Aaron's rods *swallowed up* their rods. It may, perhaps, be doubted whether the word rendered *swallowed up*, should not be rendered—*overwhelmed*: that is to say, it vanquished, overpowered, destroyed, its opponents; but as to the action of *swallowing* them, that is not of necessity implied in the original term used. Vide FRAGMENTS, No. cxlv. p. 105.

CHAPTER VIII. VERSE 2.

THE PLAGUE OF FROGS.

THE Hebrew word rendered *frogs*, has been so understood by all interpreters. It should be observed, that frogs are not born in their frog state, but are first *tadpoles*; and after a time become frogs; by a gradual and orderly change. The production of a number of *perfect* frogs, was therefore a very remarkable instance of a power over-ruling the ordinary course of nature. Nevertheless, this miracle might consist in, 1. a sudden maturity imparted to an immense number of tadpoles, so that *they* became *frogs*; without waiting for the proper and natural time of their birth into that state; or 2. in giving an impulse to an immense number of these creatures, and raising in them a desire to quit the moist, cool, flowing waters of their nativity, for the dry land, the plains, the city, &c. which could not but be, by their heat, and aridity, very contrary to the natural residence of these unwelcome visitors.

There is, however, an objection against this swarm of animals being truly *frogs*; because they came into the houses, into the chambers, *into the ovens, into the kneading troughs*. This strange representation of the matter is certainly more conspicuous in our version than in the original: frogs in ovens! [*Heb.* TANUR]; in kneading troughs! [*Heb.* MESHARUT]. But what were these *tanuri*, and these *mesharuti*, really? The answer to this question would remove a confusion from a passage in Leviticus ii. 4. where we read, "if thou bring a MEAT-offering, (which seems to imply *flesh-meat*) it shall be cakes of fine flour—or wafers—baken in

in an oven." Flour, then, is this *meat-offering*. The words imply simply "the baking of the *tanur*;"—*tanur-baken*: so that whether the wafers were baked (as they might be) on the inside, or the outside, of this *tanur*, is not determined by the phrase used. Also, whether this *tanur* was the portable oven, resembling a great pitcher, which was heated internally; or whether it was a plate of copper, put over the fire on which the preparation of bread designed to be baked was placed, may admit a question. At any rate, it is necessary to quit entirely our English idea of *ovens*, when considering these passages.

The operation in common use in England, which approaches nearest to the *tannur*-baking of this passage, is, I apprehend, the manner of baking of muffins and crumpets, in London. To the same purpose is the manner of baking *plank-bread* in Wales; and oat-cakes in some parts of Scotland.

As to the *kneading-troughs* we have given a figure of them; from which it appears, that we must also lay aside English ideas when considering them; and to that figure, with its accompanying explanation, we refer the reader.

For a figure of the pitcher-like oven, vide FRAGMENTS to CALMET, No. cix. p. 15.

VERSE 16.

PLAGUE OF LICE.

This Hebrew word CINNIM, (צנין) is by the lxx. rendered *Συνιπες*, *small flies*, GNATS; and the writer of the Book of Wisdom, says, chap. xix. 10. the land produced flies, GNATS. Origen, and Jerom, also read GNATS. I apprehend they were of the same nature as what are called *moschitoes* in the West Indies, and other sultry climates: these, says the sacred historian, "became lice [*gnats*] IN (2) man and in beast." This particle signifies UPON, no less than *in*; it is so rendered often, and often.

The following is from Mr. PARKHURST. "One can hardly suppose but the lxx. who dwelt in Egypt, knew in general what was intended by this Hebrew name; especially as their interpretation is confirmed by *Philo*, himself also an Alexandrian Jew, and by *Origen*, a Christian Father, who likewise lived at Alexandria. Both *Philo* and *Origen* represent them as being very troublesome. The latter describes them as being winged insects; but so small as to escape any but the acutest sight; and says, when *settled* on the body, they wound it with a most sharp and painful piercer." Heb. Dict. p. 362.

Notwithstanding these arguments, the learned *Bochart*, and others, have thought, that *lice* were really intended by the historian. 1. As they are said to come from the *dust* of the land—not from the waters, from whence gnats arise, in the usual course of nature. 2. As they afflicted beasts, as

well as men; which is perfectly agreeably to the nature of lice, of which every kind of animal is infested by its own species. 3. From the etymology of the word; which signifies *stability, firmness*, difficult to be got rid of, as Aristotle speaks: Hist. lib. v. cap. 31. 4. In the Talmud, *Cinnah* signifies a *louse*. These arguments are not without adequate answers; but we only say, that it is most likely the lxx. being resident in Egypt, should be best acquainted with this subject, and their version may turn the scale of opinion.

VERSE 21.

THE PLAGUE OF FLIES.

The Dog-fly, or Zimb: on which we have said enough, in FRAGMENTS, No. lvi. p. 103.

The lxx. render *κυνομυια*, the *dog-fly*: which word, says *Hesychius*, denotes *impudent, bold, audacious*; qualities which belong to the fly, and the dog; than which, says *Elian*, lib. viii. cap. 19, there are no animals more impudent. Some have thought the word signified "a mixture," or assemblage of different kinds of the fly genus; so *Aquila*, and *Jerom*. The Arabic version reads "a mixture of wild beasts, venomous insects and reptiles;" Rabbi Selomo, *all kinds of venomous animals, as serpents and scorpions*; *Aben Ezra*, "all the wild beasts mingled in association, as lions, bears, and leopards." I mention these marvellous renderings, to shew the absolute necessity of well understanding the natural history of a country; since that only can direct our enquiries: and since ALL these opposed renderings cannot possibly be well founded. Moreover, they appear to be contrary to verse 31. which when describing their removal, seems to imply the withdrawing of a single kind.

CHAPTER IX. VERSE 3.

MURRAIN AMONG THE CATTLE.

WE are told, verse 6, that ALL the cattle of Egypt died. Either then, the word ALL must be taken for a great number, as it often is; or the district throughout which the cattle died was but small; since we afterwards read, verse 19, of securing the cattle from the hail-storm, and chap. xii. 29. that the first-born of the cattle were smitten. If the reader dislike either of these interpretations, he may allow a distance of time between the two miracles, during which, the stock of cattle had been replenished in this district. As to the nature of this distemper, it appears to have been extremely rapid, and even sudden; the contagion was, it is likely, therefore, inhaled from the atmosphere; which fluid, if rendered unwholesome, would communicate disease as readily to a thousand as to one. We have had diseases among the cattle

cattle of Europe, the progress of which has been observed to advance from place to place, at the rate of a certain number of miles *per* day: whence it has been thought the cause of the disease was flying insects.

VERSE 8.

Moses took ashes from the *furnace*:—For the probable nature and form of this furnace, vide the print of “SLAVES IN THE EAST,” with the explanation annexed to it.

The nature of this disease was, probably, that of *inflammatory buboes*, or ulcers rising into *pustules*: but whether they were genuine plague sores is doubtful; because, in verse 15, Moses threatens to smite the Egyptians with *pestilence*; nor do we read that any number of persons died of this malady: pestilence therefore, seems not to have been employed hitherto.

VERSE 18.

THE PLAGUE OF HAIL.

Hail in some countries is a very common production of the atmosphere; in Egypt it is rare, because, the sultry nature of the climate does not permit its formation, the air being seldom cold enough, in its upper regions, to freeze the falling drops of rain. We see, then, a double interference of Providence in this miracle. 1. That hail should be formed. 2. That it should happen *to-morrow*,—at a time prefixed. Whoever reflects that no human power was able to direct the atmosphere to this, or to any other effect, must be convinced, that there could be no juggling trick in this case. 3. That in a certain district of country these occurrences did not take place.

Observe how the lightning is called *fire* (from heaven) which ran along [darted] upon the ground, mingled with the hail. But the hail smote man and beast: every *herb* [osheb, עֵשֶׂב] *shrubs*, and minor plants; every *tree*, larger and stronger.

Observe the duration of this miracle; usually hail-storms last but a little time; but this storm lasted long enough to terrify Pharaoh, and to induce him to intreat its suppression. In proportion to the infrequency of this kind of storm must have been the terror it infused into Pharaoh, which must have been proportionately increased by its continuance.

Scripture mentions, verse 31. *flax* and *barley*; and verse 32. *wheat* and *rye*: we shall just notice these vegetables.

FLAX, in Hebrew *Pishtah*, is the vegetable from filaments of which linen is made; so that the importance of this plant to the Egyptians can only be understood by reflecting on the commerce in linen which Egypt carried on as well with foreign countries as at home.

The flax was *bolled*; this word signifies to rise into a stalk, or stem, which is of a *roundish* form.

But some think that the seeds, or grain of the flax, were assuming a *roundish* form within their husks: and that this is the import of the word used in the original.

BARLEY is the most ancient aliment of mankind, as Pliny says, lib. xviii. on the testimony of Menander. Barley is called in Hebrew, *hairy*, [שֵׁעָרָה, SHOREH) from its long and stiff beard.

We need only mention plants so well known among us, as these are.

WHEAT also is a grain, too well known to need description: its importance is equal in Egypt and in England. The cultivation of this plant was general in Egypt; and the mention of it in so early a history, renders it likely that it was commonly cultivated, not merely in Egypt; but in the countries around: though some have thought it was late before it was introduced into Sicily, where afterwards it flourished greatly.

The Hebrew word CUSMET, (כִּסְמֶת) signifies a *hairy* plant; it is usually thought to be the *Zea*, or *Spelt*, which is a species of corn. The lxx. and *Theodotion*, render *Olyra*; and *Aquila* renders *Zea*; both which words signify *Spelt*. Vide Ezek. iv. 9. Dr. SHAW thinks this word may signify *rice*. *Hasselquist*, on the contrary, affirms, that *rice* was brought into cultivation in Egypt under the Caliphs; but I much doubt of this; and think, that from the intercourse of Ancient Egypt with Babylon, and with India, this inundated country could not be ignorant of a grain so well suited to its climate: notwithstanding this, *rice* is not, that I recollect, mentioned, or even clearly alluded to, till the time of the prophet Isaiah. Vide Isaiah xxxii. 20.

CHAPTER X. VERSES 4, 15.

THERE are in Scripture ten names for locusts. The species mentioned in the present passage is called *Arbah*; which, say the Lexicons, imports *multiplicity*; a very just description of the locust tribes! *Leewenhoeck* says, he has seen a female lay more than 80 eggs: if every female is equally prolific, and lays three or four times in a summer, what an immense multitude must issue, and that speedily, from such fertility!

The wind which brought these insects, is called *Kadim*; and is usually translated “the east wind:” but is supposed, in some places, to denote a wind south of the east: so that the lxx. render Νότον καὶ Δύση, south and south-east; also καύσωνα, a burning wind. *Bochart* prefers this rendering to the other; supposing it was more proper for the bringing these insects from Ethiopia, than from Arabia. However, this is not necessary, as locusts do not constantly observe the same courses.

The

The wind which carried away these insects is called the *sea-wind*, i. e. wind from the sea, the Mediterranean; which, therefore, we conclude drove these locusts into the Desert, and towards the Red-sea, where they perished.

VERSE 21.

PLAGUE OF DARKNESS.

It is presumable that the inhabitants of England, and Holland, have frequent opportunities of contemplating darknesses by means of fogs, &c. which in the climate of Egypt would be altogether miraculous. Where the air is so clear as hardly to form clouds, those clouds can much less appear in the state of that thick vapour which a fog in London sometimes assumes. It is common among us to say "The fog is so thick it may be *cut with a knife!*" (and I find to my surprise, the same phraseology in SCHEUZER) which I take to be perfectly analogous to the expression of the sacred writer, "darkness which might be felt." I am sure I have often felt the grossly vaporated air, the dense compact mistiness, of a London atmosphere.

The duration of this fog is marked as being *three days*; which, probably, is to be taken in the Hebrew sense, as denoting, the close of the first day, the whole of the second day, and the beginning of the third day; so that the Egyptians must have been very sensible and proportionately weary of their embarrassing situation.

As to the expressions that "they could not see each other, nor did they rise from their places;" these apparently, may be taken somewhat at large; since artificial lights, as lamps, flambeaus, &c. were in use. But these probably gave that kind of obscure solemnity of illumination, which the lamps of London exhibit during the darkness of a foggy evening.

This kind of dim half light with its concomitant, the thick air, would astonish the inhabitants of Egypt; who would rather sit at home, than venture abroad, and endeavour at their personal risque to visit their friends, or to follow their occupations,

— and through the palpable obscure, find out
Their uncouth way. —

The author of the Book of Wisdom has indulged his fancy on the subject of this darkness, and its concomitants: it is probable that such stories were in circulation among the Jews of his time; but, how greatly superior is the simple narrative of Holy Writ!

Having thus succinctly touched on each of these miracles, we may now attempt an observation or two respecting them taken together.

MIRACLES may be classed, As 1. those which are analogous to the general course of nature; but are *superior* to it, or are *varied from it*. 2. Those which are in *direct opposition* to the general course

of nature. In the first class we may instance, the depriving a person of life, as Peter did Ananias and Sapphira. It is according to nature that a person should die, but the circumstances of the deaths of those two persons, render them miraculous. In the second class we may instance, a resurrection from the dead; which is in direct opposition to the general principles of nature, and to every possible result from those principles. —

These are *extremes*: but we can easily conceive of an almost infinite variety of operations between these extremes. So a person might labour under a disease, or wound, that would infallibly kill him in six months' time; but, if it be rendered fatal *to-day*, it is by a superior power: on the contrary, a disease or wound, might according to the general course of such sufferings subside into health in six months' time, but if it be cured *to-day*, the curative power is extraordinary. These suppositions vary only in intensity of power, between an immediate sudden death, and restoration to life; they illustrate only the notion of gradation, or scale, in miraculous interposition. But other cases might be imagined, of a different nature yet equally illustrative of proportionate power; as the direction of a thunder-storm from heaven, by Samuel; of lightning, by Elijah; the extra refraction of the rays of light, in the instance of Joshua, of Hezekiah, of the *blood* 2 Kings iii. 22.—or, on the contrary, the causing of iron to swim; the alteration of gravity in a person, or body, whereby he might walk on water, or rise into the air, &c.: these are clearly *contrary* to the established and orderly course of nature: but the producing and active cause is no less miraculous throughout all enumerated.

To apply these hints to the miracles of Moses in Egypt, observe, that these miracles are analogous to the course of nature, rather than opposed to it; at least, this inference is plausible in regard to those which were imitated by the Egyptians, which do not seem to have been of a nature superior to those which the Egyptians could not imitate; yet these were according to nature; for to this day that country breeds swarms of *mosquitoes*, though not in such numbers as Aaron was instrumental in producing. The nature of the *Zimb*, or dog-fly, of Abyssinia, explains the plague of *flies* to be rather the direction of a particular insect, to accomplish a particular purpose, than any new *creation* of a specific kind, or any direction of this insect *contrary* to its nature. The mortality among the cattle is what it has pleased Providence to visit other countries with, occasionally; and our own country has smarted under it, though perhaps by very different means. The *boils* and *ulcers* were diseases, which I apprehend, are still known in Egypt: and the storm of *hail* and *lightning*, though a wonderful phenomenon in that country, yet has its principles in nature. The same may be said of the *locusts*, the swarms of which completed the devastation

devastation of the land; and of the *darkness*, of which the solid obscurity shrouded the whole city and its neighbourhood.

There remains one miracle, *the death of the first-born*, which seems to be reserved as the most convincing proof of Divine interposition:—the death of the first-born *in the same night*. Even in this miracle, observe, that these very persons were born to die, since such is the tenure of human life; but that they should *die at the same time*, is very striking. Having characterised this miracle as the most wonderful of all, let us examine some of its particulars.

1. The word *first-born* is by no means necessarily to be understood of an actually first-born child; since we read of *the first-born of the poor*, Isaiah xiv. 30. *i. e.* those extremely impoverished; and even what would be a contradiction, if strictly taken, *the first born of DEATH*, Job. xviii. 13. *i. e.* the most fatal, the most terrible of deaths. If then we take the word *first-born* in this passage to import the chief, the most illustrious, the *PRIME* of each family, we shall, I presume, perceive its full power, and shall avoid ambiguity in reference to those families which had not any *first-born CHILD*. This is also perfectly coincident with a sense of which I think the words are capable, chap. xii. 12. *upon all the DIGNITARIES of Egypt I will execute judgment: not against the gods*, as our translators read; for how could *they* feel, or what judgment did *they* [*i. e.* idol deities] experience?—or what notice is taken of any such event? But, the *chiefs* of Egypt certainly felt the judgment of God, when the land was despoiled of its *PRINCIPALS*; and the representations and clamours of their friends and connections must needs have been powerful and influential, not to say alarming to the reigning prince. This also appears to be the sense of the passage, Numbers xxxiii. 4. “And the Egyptians *buried* [implying attention, if not pomp] those whom Jehovah had smitten among them; *EVEN* those *DIGNITARIES* upon whom Jehovah executed judgments.” The mention of *burial* leads to this idea; for surely, the *gods* of Egypt are not meant to be hinted at, as if *they* were buried on that occasion.

That the *first-born* of cattle should peculiarly suffer under this stroke, is altogether singular, and indeed is enough to induce one to enquire for the true sense of the passage; but, if the prime, the most valuable of cattle, might be understood by it, which nothing forbids, then all becomes easy; and this infliction falls the more heavily on a people, whose affection for their cattle, to say nothing of some of them as objects of devotion, would lead them to great agitations, if not excesses, under this privation of their property, and their dependances on them for support. Does not this slaughter of the cattle look like a confirmation of the idea,—that a pestilential visitation was employed on this occasion?

May we venture to compare this slaughter of the Egyptians, with that of the Assyrians? 2 Kings xix. Isaiah xxxvii. They agree in some circumstances, as 1. An angel is said to have been employed in both; 2. Both were by night; 3. The survivors lament as if they were dead. As we have seen reason to think that the *secondary* cause or agent employed, in the instance of Sennacherib's army, was the Samiel or hot wind, might the same *secondary* cause be employed in the punishment of the Egyptians? was this the species of pestilence engaged? Whatever species it was, it equally obeyed the injunctions of divine power; as this might as well as any other. But, if so, then ALL the latter plagues of Egypt, those which the magicians could not imitate, were derived from the air: and their procedure was according to the usual course of nature, not contrary to it; though this and all were, perhaps, *invigorated* beyond their natural powers, and specifically directed in their effects, both as to when and where; which being foretold, and punctually and directly executed, implied the intervention of superior agency;—for what human power could have accomplished these events either as to time or place?

CHAPTER XII. VERSE 3, 4, 5.

THE PASCHAL LAMB.

THE paschal lamb in respect to natural history offers no distinction from any other animal of the species. We only observe, that a kid is admitted equally with a lamb, and that the qualities of the animal demand our notice.

It is remarkable that Homer employs one word (*μηλον*) to denote sheep or goats; and that the *fold* of either kind is expressed by one word (*σημος*): the skin of either is called also by one word, so is their excrement; and so is their voice. In these instances, then, the usage of the Greeks was similar to that of the Hebrews, who by the word *SHEH* (*שֶׁה*) denoted both species; as appears in verse 5.

The Age of this lamb, *one year*, and its sex, *male*, its qualities, *without blemish*, deserve remark. At least eight days must have passed over every animal destined to sacrifice, Exod. xxii. 30. Lev. xxii. 27. neither could it be older than one year. Now, as the ewes of Judea bring forth more than once a year, there might be more than one kind of lambs at the time of the Passover, all in their first year; 1. Those born in the month *Nisan* of the former year, these are the *spring-fallen lambs*, and they are called by Aquila *proima* (*πρωίμα*), and by Symmachus *protogona*, (*προτογονα*). 2. The lambs of the autumn-falling in the month of *Tizri*; Aquila calls these *opsima* (*οψίμα*), and Symmachus calls them *deutrogona* (*δευτερογονα*). 3. Those of the *Nisan* of the present year, which were not yet one month old. These lambs differing in age, therefore receive different appellations.

UNLEAVENED

UNLEAVENED BREAD:—This was made in haste, not to give time for the leaven to ferment in the meal, which requires some hours. See the allusion, 1 Cor. v. 6. Gal. v. 9.

BITTER HERBS:—These herbs must have been easily procurable by the Israelites; they were therefore, 1. common in Egypt; 2. the food of labourers. We have nothing to direct us in ascertaining these plants but conjecture; since what is common in Egypt now, might not have been so *anciently*. Many plants are introduced in all countries, in process of ages.

The *Mishnah*, in *Pesachim*, cap. 2. reckons five species of these bitter herbs, which it names:—1. *Chazareth*, usually taken for the lettuce; 2. *Ulsin*, supposed to be *endive* or *succory*; 3. *Tamca*, thought to be *chervil*; but some say *tansey*; 4. *Charubinin*, or *Charchobinin*: Bochart thought this might be the *nettle*, but SCHEUZER thinks it is the *camomile*; 5. *Meror*, the *sow-thistle*, or *dent-de-lion*, or *wild lettuce*: the true plant unknown.

VERSE 22.

HYSSOP is an aromatic bitter plant, very well known, and well ascertained: this therefore has no difficulty.

CHAPTER XIII. VERSES 21, 22.

THE COLUMN OF FIRE AND SMOKE, offers nothing for the consideration of naturalists; as no *natural* cloud could have subsisted so long undissolved in that sultry climate; or under the vicissitudes of moisture, wind, tempest, &c.

PASSAGE OF THE RED SEA.

[Vide FRAGMENT, No. xxxix. and *Map*.]

That the wind has great influence on narrow waters, and that, occasionally, waters are compressed by the wind into a greater depth than usual, or are rendered more shallow than usual, is well known; but the miracle in this case is augmented by the *prediction*: no power simply human could expect that the wind would blow from any certain point much less from any given point, to suit a certain purpose; and that after the accomplishment of that purpose, it should cease, and suffer the body of water to resume its former station. There seem to be traditions of this fact, preserved by several means. We cannot lay very great stress on the reports of the present Arabs around the coast, because it is probable they might learn the history from the Jewish nation; but Diodorus Siculus seems to have heard of it; for he says, *lib. iii.* "A history is related in the country of the Ichthyophagi, [on the coast of the Red Sea,] which they pretend to have received from their ancestors, that one day there was so extraordinary a reflux of water, that the whole bottom of the gulf

was left dry, and appeared verdant, because the sea was withdrawn from it. After the bottom had been some time uncovered, another great flux of water came and covered the gulf again." Under this idea, this event is referred to by *Artapanus*, (*Euseb. Prep. Ev. lib. ix.*) who gives it as derived from the inhabitants of Memphis. Josephus differs but little from these authors, *Antiq. cap. 7.* *Artapanus* says, "The king of Egypt, as soon as the Jews had departed from his country, pursued them with an immense army, bearing along with them the consecrated animals. But Moses having, by the divine command, struck the waters with his rod, they parted asunder, and afforded a free passage to the Israelites. The Egyptians attempted to follow them; when fire suddenly flashed in their faces, and the sea returning to its usual channel, brought a universal destruction on their whole army."

CHAPTER XV. VERSES 23, 24, 25.

THE BITTER WATERS SWEETENED.

BELON says of certain fountains which he supposed to be the same as those sweetened by Moses, that their waters are very salt and very bitter. The soil they rise in is barren, sandy, and nitrous, in a vast plain, about fifty paces from each other. They rise at the foot of a small hill, from whence they discharge several streams, like running fountains, but soon lose themselves in the sand. "The heat, says he, had brought on us so strong a thirst, that we were under the necessity of drinking this water; and our extreme thirst made us think it of an agreeable taste, although it is bitter, by reason of the nitre with which it is impregnated."

As to the WOOD used by Moses, it is not distinguished in the text; the sacred writer only naming it *wood* or *tree*. The rabbins, indeed, tell us that it was itself of a most bitter kind; but there is no need of such artifice to augment the miracle. The probability is, that it was rather of a corrective kind; and this seems to have been the opinion of the author of Ecclesiasticus, chap. xxxviii. 5. "Was not the water made sweet with wood, that the virtue thereof [*i. e.* of the wood] might be known?" This, at least, is certain, that no wood possessing such natural properties is now used by the Arabs, in the neighbourhood, who would never have lost the knowledge of such a valuable article, had it been communicated to them. It seems to be useless to endeavour to identify this wood, but some have supposed that it might be of the *Nerium*, or the sugar-cane family. M. *Forskat*, in answer to *Michaelis*, says, a Caraites Jew in Cairo told him they had a tradition that it was the *Nerium Oleander*. NIEBUHR, Pref. xxix.

PALM-TREES.—This kind of tree is pretty well known among us; and there is no difficulty in admitting

admitting the reference of the Hebrew word to this tree. The palm, says Plutarch, (*de Pythia*) is a tree which loves water; and Pliny says, it loves to drink throughout the whole year. Ecclesiasticus also says, xxxiv. 15. "I was exalted as a palm-tree in Engaddi;" which we know was a very watery spot, and therefore fit for gardens, &c. We learn from Sir Rob. Wilson's History of the Expedition to Egypt, page 18, that when the English army landed there in 1801, under Sir Ralph Abercrombie, to expel the French from that country, Sir Sidney Smith "assured the troops that wherever date trees grew, water must be near:" and so they found it on digging, usually within such a distance that the roots of the tree could obtain moisture from the fluid. This fact must have been the same, and at least equally well known, in the days of Moses.

This tree, of that kind which bears dates, is general in the East, though rare in Europe. The leaves which crown the top of it are brought over as lining to boxes of fruit, &c. sold by our grocers.

Of ELIM, Dr. SHAW says, "I saw no more than nine of the twelve wells that are mentioned by Moses; the other three being filled up by those drifts of sand which are common in *Arabia*. Yet this loss is amply made up by the great increase of the palm-trees; the seventy having propagated themselves into more than two thousand. Under the shade of these trees is the *Hammam Mousa*, the Bath of Moses, which the inhabitants of Tor have in extraordinary esteem and veneration; acquainting us, that it was here that Moses himself, and his particular household were encamped."

Travels, p. 350. *Folio Edit.*

CHAPTER XVI. VERSES 4, &c.

THE MANNA.

THIS production was, probably, like many other miracles, partly natural, partly miraculous. It is certain that manna is now found on trees, &c. in the East; and perhaps in this very desert. But, that it should fall in such quantities, and under such restrictions and peculiarities, is not according to nature: that it should breed worms if kept beyond a day; that none of it should fall on the Sabbath, are altogether extraordinary: that it should melt by the heat of the sun is not so wonderful, since what is now found in these parts exhales like dew after the sun is hot. Neither is it certain that there was any thing unaccountable in the quantity gathered for each person, since it is likely the people collected according to their families; the number of children in each, would adjust a considerable apparent difference of quantity; not to say, they might impart to each other as wanted. We have no need to multiply miracles; which seems to have been a favourite amusement among the Rabbins.

It may be doubted, however, whether ALL the camp depended *constantly* on this manna for food;—where were the cattle, the milch kine, &c. brought out of Egypt? vide Num. xi. 22.; and though the Israelites might have little fish, yet vegetables of some kinds they might procure; as we are not, perhaps, under the necessity of supposing that they were *entirely* secluded from intercourse with adjacent tribes of Arabs, and neighbouring nations; and if *they* lived on the dates of the palm-tree, why not Israel also? and why might not Israel purchase those and other fruits? "The *mixt multitude* fell a lusting." Num. xi. 4. Many things in which the *mixt multitude* were principals, or *primaries*, are spoken of in the History as relating to the whole people.

I shall translate, NIEBUHR'S account of the manna found in the East, p. 128. *Fr. Edit.* 4to.: "Manna is found at present in divers parts of the East; but I own that I neglected to procure information at the most celebrated places, that is to say, around Mount Sinai, famous for the manna of the Israelites. At *Merdin* it attaches itself like a meal or powder, on the leaves of certain trees which they call *Ballot* and *Afs* [at Aleppo called *As*]; and which I believe to be oaks. Some affirmed they found manna between *Merdin* and *Diarbekr* on the trees named *Elmäs* and *Elmaheb*. Others, from whom I enquired whether this was certain, had never seen any on trees of those kinds; nor did they recollect at Aleppo to have found it on the shrub *El hâdsje*. All agreed in affirming that between *Merdin* and *Diarbekr* it was principally gathered from those trees which produce the gall-nut, *i. e.* oaks. The gathering time of this manna at *Merdin* is in July or August; and they say it is most plentiful after a certain very thick fog, or during moist weather, rather than during the clear days. No care is taken of these trees near *Merdin*; but when the manna falls, any body who chuses gathers it in the woods, without asking, or purchasing permission from the government. It is gathered in three different manners, and it differs in quality accordingly. Some go to the woods *before sun-rise* to gather it in a linen cloth, by shaking the leaves: it is now quite white; and *this is the finest*. When it is not gathered in the morning, and the day becomes hot, the manna melts in the sun-beams. Nevertheless, it is not lost, but it augments and thickens from day to day on the leaves. To obtain this, as many leaves as may be, are carried home, where they are thrown into water, (some say, *boiling*), and the manna floats on the top, like an oil. Some persons do not take this trouble, but pound the leaves and manna together. This is the worst kind, and apparently is the same as J. B. Capello calls, in his *Lessico Farmaceutico*, "leaf manna," or *manna forzatella*. It is also called, "heavenly manna." Nevertheless, notwithstanding that name, the orientals

tals do not believe that it falls from heaven; for, if so, then no doubt it would be found on many other kinds of trees. It is gathered also in Persia, and especially in abundance in Kurdestan.

"I was assured at *Basra*, that the manna named *Tarandsjubin*, or *Taransjubil*, was gathered in great quantities near *Ispahan*, from a little thorny bush. I enquired for this kind of manna at *Basra*, and I found that it consisted of small grains, round and yellow; by consequence of the same figure as the manna of the Israelites is described to be, Exod. xvi. 14, 31. Num. xi. 7. Perhaps, it was this kind which served as food to the Jews during their journey, for there are many thorny bushes in the desert around Mount Sinai; and that district is in nearly the same latitude as *Ispahan*; but if the children of Israel enjoyed their manna during the whole year, that was by miracle; for the manna *Tarandsjubin* is found only during certain months. I do not know whether sugar is cultivated in other countries of Arabia beside *Yemen*. But if the Jews had found in the desert of Sinai only the natural *Tarandsjubin*, it would have been a very pleasant thing to them. In the *Kurdestan*, at *Mosul*, *Merdin*, *Diarbekr*, *Ispahan*, and probably in other cities, they use manna only, instead of sugar, for their pastry and other dishes. Much of it may be eaten without its proving purgative. Nevertheless, a person with whom I conversed at *Basra*, thought, that both kinds were of that quality. Perhaps this is sensible only after it has lost its freshness. The tree which produces wild honey was not known at *Basra*; but an inhabitant of *Ispahan* affirmed, that this tree grew commonly in Persia, and became very large."

The comparison of the manna to sugar by this intelligent traveller, the observation that it is used in pastry, and its figure, as grains, will not fail to strike the reader. I have already doubted whether the Israelites lived wholly on manna, which, though we cannot properly call it a vegetable gum, yet is clearly a vegetable emission, or inspissation; and, at least partially, a juice from the tree or shrub. By way of shewing the nutritive effect of such food, I shall offer *Hasselquist's* account of a caravan supported by *Gum Arabic*; which we know is a vegetable juice also. "The Abyssinians come yearly to *Cairo*, to sell slaves, gold, elephants, drugs, monkeys, and parrots. They cross the most frightful deserts; and, as their journey depends on the season, they know as little as sailors do, how long they may be in their passage; by which they are often exposed to a scarcity of provisions. Such a circumstance happened in 1750 to the caravan from Abyssinia: it stopped two months in its course, and provisions failed. In this extremity, they had recourse to the gum-arabic, of which they had a great quantity with them; and it served to support

more than a thousand men during two months. The caravan arrived safe and sound at *Cairo*, without having lost any considerable number of persons." In this instance, the caravan lived wholly on this vegetable substance, by necessity; it was therefore analogous to the camp of Israel: but the camp of Israel lived many years on the manna, whereas this caravan lived only two months on the *gum-arabic*.

In the sequel of this history we find, that the insects bred in the manna are called by two names: 1. *Rimmach*, (רמח) verse 24. which signifies *to breed worms*; 2. but verse 20, *Tulo*, (טולע,) probably derived from a root which signifies *to devour, to swallow*. Vide Job xxv. 6. Isaiah xiv. 11. Perhaps our *mites* in cheese may give us an idea of these insects.

What shall we say to the imaginations of the Rabbins, (*Solomon*, in *Meschilta*, and others,) that the melted manna formed whole streams and rivers of very sweet water, where goats and deer resorted to drink; and where even fishes were taken which had the taste of manna? From such wild interpreters, and their extravagant interpretations, good Lord deliver us!

VERSE 13.

THE QUAILS.

It is well known that there has been great difference of opinion among the learned with respect to what creature is intended by the original word *Selavim*, (סלעים,) rendered by our translators, "quails." This rendering is supported by *Bochart*, *Hieroz.* p. 1. lib. 1. cap. 14.; by *Josephus*, lib. iii. cap. 1. 12.; by the Rabbins, who reckon four sorts of quails; 1. The *Beccafigo*; 2. The Thrush; 3. The Pheasant; 4. The Quail. The *lxx* translate *Ortygometre*, the "mother quail," a great quail: and with them agree *Appollinarius*; *Wisdom*, chap. xvi. 2.; xix. 12.; and *Philo*, *de Vita Mos.* lib. i. On the other hand, the learned *Job Ludolph* insists that these *Selavim* were *locusts*; because, 1. The word signifies *multitudes*; 2. The eastern versions retain the original word, whereby it should seem they do not think it the quail, which they call by another name. 3. *Ludolph* owns that he received the first idea of his opinion from *Porphyry*, lib. 1. who mentions an army in Africa, ready to perish by hunger, when a cloud of locusts coming from *Libya*, relieved their distress. 4. Many tribes of people live on locusts: this must be admitted; and that those insects are sufficiently abundant to maintain them. *SCHEUZER* assents to this opinion; and the Jews in Arabia say the same, *NIEBUHR*, p. 152. Fr. Edit.

In this passage in Exodus there seems to be an anticipation (if not a mixture) of facts. 1. *At even the (Selav) quails came up and covered the camp*: 2. In the morning the dew lay round about the host: 3. After the dew was exhaled, the manna appeared

appeared. From hence it seems that the quails came before the manna; and the same order is observed, *Psalm* cv. 40. "The people asked, and he brought quails, (*Selav*,) and satisfied them with the bread of heaven." Now, if these *quails* were caught by them in the evening, how could they want (food) manna the next morning? Why were they not satisfied with the *quails* taken? [of which, by the bye, no other notice occurs; no "standing up all that day, and all that night, and all the next day," here; but the whole remainder of the chapter treats of the manna].

This is the first mention of *Selav*, and we observe that it occurs here in the singular form, with a demonstrative (ה), literally, "And it was in the evening, and (it came up, or) it went up, THE *Selav*, and it covered the camp; and early in the morning was a layer of dew around the camp; and the layer of dew went up," and behold—the manna, &c. Now, this *Selav* could not be a *single* quail; for no single quail could cover the camp. [Can this *Selav* mean a *covey*?] The circumstance of a great number of *quails* would have been noticed. If we derive this word from its root (שלו), it signifies *quietness, tranquillity, composure, STILLNESS*. Under these uncertainties, may we refer this expression to the state of the weather in the evening, preparatory to the thick dew of the morning? in which case the translation would be, "And it was in the evening, and a (dense cloud or) VERY THICK FOG came up, and covered the camp; which fog or cloud, being condensed during the night, early in the morning a layer of dew was spread around the camp;" and when the dew was exhaled, the manna was found underneath it.

To vindicate this idea, I shall only recall to the reader's notice what we lately quoted from NIEBUHR: "The gathering time of this manna at *Merdin* is in July, or August, [the sultry time of the year,] and they say it is MOST PLENTIFUL AFTER A CERTAIN VERY THICK FOG;—they go to the woods BEFORE SUN-RISE to gather it:—it is now the finest." This is in short, a correct description of the conduct of the people, as directed by Moses; and we know that fogs appear only in still tranquil weather; which is perfectly agreeable to the import of the word, and its root. On this principle we might dismiss the *quails* from this passage in Exodus. In that case, all that follows is, that Moses has not recorded the giving of the promised *flesh*; [if indeed that promise refer to *this very evening*, and not to a *daily supply* of food, *q. flesh*, or *bread*, at evening or morning—the proper parts of the day, generally.] We shall find he has omitted other particulars.

The passage, *Psalm* cv. 40. yields us no assistance on this subject; for though, according to our version, the *quails* are *before* the manna, yet the

word is *Selav*, here also, not *Selavim*; and is no otherwise different from the word of our text, than by omitting the (ה) THE; and it might be rendered,

They asked, he brought on (the) *Selav*,
And bread from heaven satisfied them.

So that the *Selav* here may as well be preparatory to the dew, and so to the manna, as any thing else.

But there seems to be yet another idea: Is this *Selav*, or *Selava*, absolutely the same as the *Selavim* in Numbers? Might it not be an attendant on them, yet not identically the same?

We have another history of quails in Numbers xi. 31. where we read, "And there went forth a wind from the Lord, and brought quails (*Selavim*) from the sea, and let them fall by the camp, as it were a day's journey on this side, and as it were, a day's journey on the other side, round about the camp; and, as it were, two cubits high upon the face of the earth. And the people stood up all that day, and all that night, and all the next day, and they gathered the quails; he that gathered least gathered ten homers; and they spread them all abroad for themselves round about the camp." We must endeavour to render this literally: "And a wind went forth from Jehovah himself, and cut off [stopped] *Selavim* from the sea, and left them, (dropped them, quitted them,) over the camp, like the journey of a day here, and like the journey of a day there, round the camp, and like two cubits over (upon) the face of the ground. And the people rose up all that day—and they collected (or gathered) the WHOLE DENSE CLOUD, (taking the word *Selav* in this sense,) i. e. of *Selavim* (שלוה AT HESHELAV.) The least share gathered was ten homers, &c. To this we must add the narration, for such it is, of the Psalmist, *Psalm* lxxviii.

He caused an east wind to blow in the heaven:
And by his power he brought on the south wind.
He rained flesh also upon them as dust,
And feathered fowls like the sands of the sea:
And let fall in the midst of their camp,
And Round about their habitations.

These accounts illustrate each other; and to understand the history, we must combine them.

Observe 1. Two winds were employed; 1. the east wind; 2. the south wind. Now certainly these winds did not blow at the same time; but the east wind blew first: this drove the *Selavim* toward the sea, when, quite unexpectedly, the Lord sent a south wind, which wafting these creatures in a different direction, cut them off from the sea, and brought them over the camp of Israel; where failing them, it let them fall, they being now within reach of the people,

Observe 2. There are two places where these creatures fell: 1. The midst of the camp, the interior

terior of the camp; 2. The spaces round their habitations. The midst of the camp is a fixed station, surrounded by the tents, &c.; but the spaces round about the camp extended to the distance of a day's journey, in sundry directions, equal to the diameter of the whole cloud: and the Israelites going out to gather what fell, went from place to place till they had strayed a great distance from the camp, even a day's *straggle*.—1. They went forward one day, gathering as they went; 2. They gathered also the next night; and 3. Then thought of returning to the camp: but employed the next day also in gathering as they returned. This diminishes the extent of the day's journey very much; since, to say nothing of the uncertain safety of people wandering to any considerable distance, the time consumed in gathering, and the nature of the action, looking here, picking up there, &c. &c. would leave so little time for making progress in a direct line, that, as it were a day's journey, seems to be inserted in a loose manner, not precisely conveying any correct idea of the space occupied by the *Selavim*.

Observe 3. Here are also, as it may be conceived two kinds of creatures mentioned: 1. What is called *flesh*; 2. What is translated *feathered fowl*; and for aught that appears to the contrary, these might fall in two distinct places; one kind falling, 1. In the midst, the interior, of the camp; the other kind, 2. Falling in the open space around the camp: 1. One kind being rained on them as dust; 2. The other like the sand of the sea.

Let us examine each of these: The first is called *flesh*, meaning, I presume *delicacies*; it is also said to be *rained*. Now the idea of *raining* is not that of very large lumps, or great masses, but of small, little drops; and this the rather, if the word here used, *meth*, signify a *shower*, whereas a heavy, a pelting rain, is expressed by the word *gemesh*. "He showered down flesh, what was esteemed a delicacy, upon them."—Here some may think we find the locusts of Ludolph; for this word *shower* aptly explains the falling of creatures no larger than locusts, and it perfectly agrees with the history in Numbers, that the people gathered the whole cloud—dense body—of them. That locusts are esteemed a delicacy, as we esteem shrimps and crayfish, is confirmed by every traveller into the East. To this agrees also, 1. The extent around the camp to which they fell; 2. The spreading of them abroad by the people, which is constantly practised to locusts; 3. The measuring them by bushels, whereas birds would have been counted by dozens; and 4. Their immense multitude; on which I shall only hint at the calculation of SCHEUZER, who takes the day's journey at a Sabbath day's journey only, and excludes the whole area of the camp: yet he says the quantity amounts to 854,507,000 cubic feet of creatures, and that the 120,000,000,000 of quails of which *Cornelius à Lapide* speaks, is not

nearly enough for the true number. On the other hand, locusts fly in immense quantities: *St. Augustin* mentions "a prodigious multitude of locusts; an innumerable cloud." *de Civ. Dei*, lib. iii. cap. 31. *Alvarez* says, he saw an army of locusts, which occupied the space of *eight leagues*, Portuguese, (*dous covados d'altura*,) two cubits high. *Aldrovandus* reports, on the testimony of *Surius*, that in 1541, in the provinces near Poland, was seen a body of locusts, one cubit high, and many miles in length and breadth. Add, therefore, to what has been said, that they lay in heaps of various depths.

We read, the quantity gathered was "ten *homers*;" now of the manna the Israelites gathered only one *omer*, which is the tenth part of a *homer*; so that they gathered an hundred times as much of this supply as of the manna: the quantity is excessive, if of *quails*; though the similarity of the words *omer* and *homer* disguises it in our translation.

If by *flesh* the Psalmist means locusts, what does he mean by "feathered fowl?" (literally, "*winged flyers*;" i. e. of any sort.) And here we are happily assisted by the accounts of modern travellers, who mention a bird that devours the locusts, and follows them in their migrations. This, *perhaps*, is the "*winged flyer*" of the Psalmist, and it may possibly be the *Selav* of Moses, if we take that word to denote a bird, or covey of birds. If this bird were now known in the East by the name, *Selav*, *Selava*, it would render such a notion very plausible; but that does not appear to be fact. And indeed, as *Michaelis* observes, it is probable the Arabs might derive this name from the Jews, and the Jews from the Bible, so that still our evidence would be incomplete. We shall offer a few testimonies on the subject of this bird, (which might accompany the locusts in the camp of Israel; but certainly in no such numbers as the *Shelavim* themselves,) by way of conjecture merely.

"I had once an opportunity to see large swarms of locusts, in the island of Cyprus; and till that time had no adequate idea of their numerous hosts, and rapacious depredations. In going in a chaise from Larnica, to a garden at the distance of four or five miles, the locusts lay swarming, ABOVE A FOOT DEEP, in several parts of the high road, and thousands were destroyed by the wheels of the carriage crashing over them.—The locust-bird, which providentially appears at the same time, is of infinite service on these occasions; and on that account is much respected by the Turks. Other birds also devour the locust, as starlings, sparrows, and swallows; and great numbers, while yet young, are destroyed by another species of insect; but the locust-bird is the most formidable enemy of all."

Dr. RUSSELL'S *Alippo*, p. 229.

"TURDUS *Roseus*, Linn. S. N. p. 294. *Smurmur*—Locust-Bird. This bird is about the size of a starling; the bill and legs are black; the plumage on the body is of a flesh colour; that of the head, neck

neck, wings, and tail, black. The locust-bird appears at Aleppo in June, about the time the white mulberries are ripe; and it feeds on that fruit, at a time when no locusts are to be found."—Dr. RUSSELL's *Aleppo*, p. 205.

Tavernier tells us, p. 147. "On the frontiers of Media and Armenia are to be seen a great number of birds, much like to our ouzils, much about the same time the corn begins to appear; but then is the ground covered with such infinite swarms of locusts, that the Armenians are forced to betake themselves to their processions, and to water the ground with a water which they fetch a great way off, whereinto the bodies of several martyred Christians were thrown. Three days these processions and waterings of the ground continue; and after that, whether it be that the fore-mentioned birds do eat the locusts, or only drive them away, in two or three days the country is clear of them."

NIEBUHR relates a story of fetching to Mosul water from a great distance, and in a particular manner, in order to attract this locust-bird, p. 153, Fr. Edit.: adding, "But the truth is, that if the locusts are the best food of the *Samarmog*, or locust-bird, and that this bird has a natural inclination to destroy them, even those which it does not eat, he would readily come and seek them of his own accord, without the chiefs of *Mosul* giving themselves the trouble to cause this water to be fetched from so far, and at such an expence." Niebuhr proceeds to mention the name of the bird *Salva*, as known to the Arabs; but his information is not complete, as neither himself nor Mr. *Forskal* could procure a sight of the bird: his intelligence from Constantinople, *not from Arabia*, led him to the *quail*, under this name.

We gather from Dr. RUSSELL that locusts may lie *two cubits high upon the ground*, (which certainly is the literal rendering of the Scripture,) since the Dr. found them above a foot deep, and for several miles together. And if there were two kinds of creatures, then the locust-eater may be that feathered fowl to which the Psalmist alludes, and which Moses calls *Selav*. What other reason can be given why Moses says, in verse 31. the wind cut off *Selavim* (plural) from the sea, and, in verse 32. the people collected the whole *Selav* (singular), compared with the *Selav* of Exodus xvi. 13. we cannot determine. If *Selav* refer to the locusts, it may mean the cloud formed by their multitude: if to the feathered fowl, the Psalmist might know that these locusts were followed by a bird; and might understand the locust-eater of course. If Moses does *not mention* two different creatures, neither does he mention two different winds: the Psalmist may have supplied both omissions.

In favour of *quails* as being the *Selavim* of Moses, the strongest modern testimony is that of

Hasselquist, who, mentioning the quail of the larger kind, says, "It is of the size of a turtle-dove; I have met with it in the wilderness of Palestine, near the shores of the Dead Sea and the Jordan, between Jordan and Jericho, and in the deserts of Arabia Petrea. If the food of the Israelites was a bird, this is certainly it; being so common in the places through which they passed." I am not sure whether this *IF*, and this *commonness*, are not great deductions from this testimony; which certainly does not meet the objections stated against quails: nevertheless, as quails are undoubtedly birds of passage, these *Selavim* *might* be quails; but where could they be going to? If from Egypt or Africa to Europe, as is their regular course, an east wind must have blown them further off from the camp of Israel in Arabia Petrea; and a south wind might have crossed them in their flight, but to no advantage to the Israelites. It would have required a west wind to drive them from Egypt to the present station of the Hebrew people, whether these quails had been going from Europe to Egypt, or from Egypt to Europe. I believe they never cross in flights to any part of Arabia.

As to the anger of God, which followed the eating of this supply, probably its fatal effects might arise from repletion, from that gluttony which accompanied the devouring of them, as one cause; or, if the *Selavim* were locusts, excess of the same vice in eating them, of which a superabundance might be very prejudicial to health; not omitting the stench arising from so many thousand heaps of locusts spread about for the purpose of being dried, &c. As we read of plagues originating from the multitudes of dead locusts cast on the sea-shores, it is no wonder that the same effect should follow when they were spread abroad by the Israelites; and this would be greatly increased if the weather were intensely hot; and if the fire of the Lord, mentioned verse 1, 2, 3, were lightning. This is supposing that it pleased God to use secondary natural causes for the punishment of this people, which, that he *might* do, none can deny.

CHAPTER XIX. VERSE 4.

THE EAGLE.

THE Hebrew word *Nescher* has always been taken for the eagle: the expression, *how I have carried you on eagle's wings*, is softened in the lxx. who say, *as on the wings of eagles*; and this, perhaps ought to be adopted; yet the passage, Deut. xxxii. 11. "as an eagle stirreth up her nest, fluttereth over her young, spreadeth abroad her wings, taketh them, beareth them on her wings," should seem to support the present reading and translation. I have not met with any modern naturalist who gives a satisfactory account of this action of the eagle; perhaps,

perhaps, because this bird, living in crags, &c. is not sufficiently watched at the proper time. The eagle is a bird too generally known among us to need enlargement in this place.

CHAPTER XXIII. VERSE 28.

I WILL send HORNETS before thee, to drive out the inhabitants of Canaan. Vide Deut. vii. 20; Joshua xxiv. 13. In Wisdom xii. 8. we read *wasps* instead of *hornets*. I would refer, in the first place, to the *Zimb* of Ethiopia, as not impossible to have been commissioned in some of its families, to effect this purpose; but as we are not certain that the *Zimb* naturally breeds in Canaan, we shall restrain our notice to *wasps* or *hornets*; either of which insects may answer to the sacred texts.

The Syriac version names these insects *Zibboritha*, to which the Chaldee word *Zibbora* is allied; and this is by the modern Rabbins translated *Wasp*, and *Hornet*. This word has some resemblance to *Zimb*; the insect of the desert, as described by Mr. BRUCE, whose account, however, has been suspected by later travellers, of gross exaggeration; as Lord Valentia, lately did me the honour of remarking. His Lordship when on the coast could obtain no intelligence in confirmation of Mr. BRUCE's statement.

As to similar subjects, *Theodoret* reports that *Saporus* was obliged to raise the siege of *Nisibis*, being unable to resist the *gnats*, which pestered him. *Jamblichus*, (in *Babylonics*) reports that the Babylonian troops being unable to endure the stings of *bees*, were obliged to take to flight. *Eliau* says, (in *Antenoris Creticis*, lib. xvii.) that certain *bees*, named *Chalcoides*, came in swarms into the city of the Rhacians, as if by divine commission, and extremely incommoded all they met, by deeply stinging them; insomuch that the inhabitants, unable to resist them, were obliged to quit their residence. In the same author, lib. xi. cap. 28. is a history of the *Phasaelites*, driven from their country by *wasps*. On which we may remark, that these *Phasaelites* inhabited the mountains of *Solymæ*, and were originally of Phenicia, that is to say, descendants of the Canaanites; and very probably were some of those very people who were expelled their country by those *wasps* or *hornets*, which were, in a manner, like detachments of light troops, sent to precede the army of Israel.

CHAPTER XXV. VERSES 1—7.

SHITTIM WOOD.

WHAT particular species of wood this is, interpreters are not agreed: indeed the difficulty of determining what wood is intended here, has been felt by all interpreters, since they retain the original word, and do not translate it. The Rabbins prefer the *Cedar*; which is singular enough, as that tree is so frequently explicitly mentioned in later

books of scripture, by its own proper title. Some have thought the *shittim tree* was the *Pine*. The lxx. render ἀσηπτα ζυλα, incorruptible wood.

The most probable conjecture is, that this tree is the same as the *acanthus*, or the *acacia vera*; which is about the size of a mulberry tree. It produces yellow flowers, and pods like lupines: this tree yields the gum-arabic. *Prosper Alpinus*, and *Belon*, assure us that it grows abundantly in Egypt, in places far from the sea; in the mountains of Sinai, near the Red-Sea, around Suez, and in the deserts. *Herodotus*, lib. ii. cap. 96. says the Egyptians built ships with it. Of *shittim* wood were made the ark of the covenant, and various articles of the sacred utensils. The bark of this tree is of a greyish black; its wood is of a pale yellow colour; its leaves resemble those of the lentil; many hang together on the same side of a branch. The branches are full of thorns, which are often in pairs; the branches also spread wide asunder. Mr. PARKHURST thinks its name is derived from its thorns, from their making animals *decline*, or *turn aside*, (πῶσ): I rather conjecture it may be from the *spreading* of its branches, which, themselves, appear to me to *decline* or *turn aside*.

Dr. SHAW says, *Travels*, p. 444. "The *acacia*-tree being by much the largest, and the most common tree in these deserts (of Arabia Petræa) we have some reason to conjecture that the *shittim* wood was the wood of the *acacia*. This tree abounds with flowers of a globular figure, and of an excellent smell, which may further induce us to take it for the same with the *shittah* tree, which, in Isaiah xli. 19. is joined with the myrtle, and other sweet smelling plants." I must rather hesitate in admitting the Doctor's conjecture, that the *shittah* tree is the same with the *shittim*. 1. As one word seems to be feminine, the other masculine; but, there may be trees of each sex, as is implied in Mr. BRUCE's remark below: 2. As the "planting the *shittah*, in the wilderness," if it was the *acacia*, could have nothing extraordinary in it, (which idea is implied in the passage); because the wilderness, and even the desert, is the *natural residence* of the *acacia*.

Mr. BRUCE says, *Travels*, vol. 1. p. 93. "We passed *Moote*, a small village with a great number of *acacia*-trees intermixed with the plantations of palms. These occasion a pleasing variety, not only from the difference of the shape of the tree, but also from the colour and diversity of the green.

"As the sycamore in lower Egypt, so this tree seems to be the only indigenous one in the Thebaid. It is the *acacia vera*, or *spina Egyptiaca*, with a round yellow flower. The MALE is called the *saiel*; from it proceeds the gum-arabic, on incision with an ax. This gum chiefly comes from *Arabia Petræa*, where these trees are most numerous. But it is the tree of all deserts, from the north-most part of Arabia to the extremity of Ethiopia; and its

leaves the only food for camels travelling in those desert parts."

This very probably describes the *shittim* tree; but the *shittah* is, perhaps, not an equally uncultivated tree.

CHAPTER XXVIII. VERSES 17, 18, 19, 20.

THE HIGH PRIEST'S PECTORAL.

ORDER OF THE STONES IN THE PECTORAL OF AARON,
with the name of the Tribes engraved on them.

1. ODEM	Carnelian,	REUBEN.
2. <i>Phitdah</i>	Topaz,	SIMEON.
3. <i>Bareketh</i> ,	Emerald,	LEVI.
4. <i>Nophech</i> ,	Ruby,	JUDAH.
5. <i>Saphir</i> ,	Sapphire,	ISSACHAR.
6. <i>Jahalom</i> ,	Diamond,	ZABULON.
7. <i>Leshem</i> ,	Hyacinth,	NAPHTHALI.
8. <i>Schebo</i> ,	Agate,	GAD.
9. <i>Achlamah</i> ,	Amethyst,	DAN.
10. <i>Tarshish</i> ,	Chrysolite,	ASHER.
11. <i>Schoham</i> ,	Sardine,	JOSEPH.
12. <i>Jaspeh</i>	Jasper,	BENJAMIN.

There is no satisfactory information to be obtained whereby to identify these precious stones; I have therefore copied them, as above, from SCHEUZER, for the purpose of comparison with our public version, without embarrassing the reader with repetitions of those various versions and conjectures, which are acknowledged to be insufficient. There is nothing effective in NIEBUHR.

CHAPTER XXIX. Verse, 13, &c.

PARTS SACRIFICED TO GOD.

ON this passage it is not enough to consult Grammarians and Dictionaries. Nature and Natural History are much superior instructors; and those who perform the laborious occupations of the butcher are likely to be better acquainted with the parts described, and the causes of their reference to different services, than the most profound Lexicographer, who has studied words only.

The word employed to denote the fat which covers the kidneys, is by some rendered *marrow*, as by the lxx. and *Vulgate* Gen. xlv. 18. "the marrow of the Earth:" Numb. xviii. 12. "the marrow of oil and wine:" Deut. xxxii. 14, "the marrow of wheat." The intention of this phrase is plain; intending the most excellent, the *prime*. The fat being the only part of the animal susceptible of rapid consumption by fire; it was therefore allotted to the altar; which was to partake of the sacrifice, by means of this inflammable portion.

Among those parts of sheep, which being covered with fat, were to be burned on the altar, the tail is enumerated. As this is contrary to the cha-

racter of the tail of our English sheep, it is proper to remark, that, in the East, there are breeds of sheep whose tails are large, very broad, and are made up of fat: they weigh sometimes 15, 20, even to 40 or 50 pounds. This great weight obliges the shepherds to put under them small supports, from whence these sheep are ludicrously said to carry their tails in go-carts. These fat tails are esteemed great delicacies. It is remarkable, that the tails of animals are called in Hebrew *Zanab*; whereas the tail of the sheep is called by a particular name, *Aliab*; which the Arabs seem to have retained. The lxx in this place and Leviticus, speaking of these fat tails, do not use the common words, *κερκος*, *εφα*, but another, *οσφυν*; and for the sake of correctness, such distinctions should be observed in all translations.

I shall only add the following testimony of Dr. RUSSELL, omitting a numerous body of witnesses. "This broad flattish tail is mostly covered with long wool; and becoming very small at the extremity, it turns up. It is entirely composed of a substance between marrow and fat, serving very often in the kitchen instead of butter; and, cut into small pieces, makes an ingredient in various dishes. When the animal is young, it is little inferior to the best marrow. Leo Africanus asserts, that he saw in Egypt a sheep's tail weighing 80 pounds. (Afr. Descript. p. 298.) Symon Simion, in his Itinerary, p. 39. talks of sheeps' tails in Egypt weighing 70 pounds. But these enormous tails were produced by pampering the animal with bran and barley; the tails of others, fed in the usual way, were from ten to twenty pounds weight."

CHAPTER XXX. VERSES 23, 24, 25.

THE ANOINTING OIL.

TAKE thou also unto thee principal spices; of pure MYRRH five hundred shekels; and of sweet CINNAMON half so much, even two hundred and fifty shekels; and of sweet CALAMUS two hundred and fifty shekels; and of CASSIA five hundred shekels, after the shekel of the sanctuary; and of OIL OLIVE an hin: and thou shalt make it an oil of holy ointment, an ointment compound after the art of the apothecary: it shall be an holy anointing oil.

This was composed of several ingredients:

1. MYRRH. I apprehend there is no reason for doubting whether this word be correctly rendered, as the general opinion rests in its propriety. This drug is well known to be a vegetable juice, drawn from the tree by incision. The tree is a native of Abyssinia.

2. CINNAMON. Whether this was the prime cinnamon now brought from the island of Ceylon, is somewhat uncertain; though I see no decisive arguments to the contrary; but it might be another sort. It has been thought by the best naturalists,

turalists, (including our own *Ray*, Hist. Plant.) that our *Canella* is the same as the cinnamon and cassia of the ancients; or, at least, the difference is but small.

3. SWEET-SCENTED CANE.—*Calamus Aromaticus*:—This was well known to the ancients, though it is not much used among ourselves. *Dioscorides*, lib. i. cap. 17. and *Pliny*, lib. xii. cap. 22. mention it. *Pliny* gives directions for choosing it, and says it grows in Arabia and Syria, (but the best is supposed to come from India.) It grows in marshes which are dry in summer. The best *calamus* diffuses its agreeable fragrance to a very considerable distance around it.

4. CASSIA, *Heb. Kiddah*.—This is taken by some for another kind of cinnamon: it probably is the *cassia lignea* of the shops, which is an aromatic bark, not unlike cinnamon.

The proportions of these ingredients deserve our notice. Observe, the word *shekel* is not expressed in the original; so that some have supposed the *gerah* was the weight intended; but the *shekel* seems to be supplied by verse 24.; "According to the *shekel* of the sanctuary:" these words, however, probably denote only a correct weight.

The difficulty is, that so great a quantity of drugs, put into so small a quantity of oil, would render the mixture much too thick, and nearly immoveable. To answer this difficulty, some have supposed the drugs were previously steeped, and their oil drawn from them, which oil was mixed with the pure oil of olive; others think, recourse was had to pressure, to force out an oil strongly impregnated; others think the mass was distilled; some think that the value of the ingredients is intended: but all agree that 62 lbs. of aromatics to 12 lbs. of oil is not according to modern art; and seems contradictory to the exercise of art in any state of practice. The adoption of *gerahs* instead of *shekels* would give a proportion of 35½ oz. of drugs to 123 oz. of oil, or 1 to 3½. In common, 1 oz. of drugs to 8 of oil is esteemed a fair proportion.

VERSES 34, 35.

THE SACRED PERFUME.

This appears to be composed of four ingredients:—*Stacte*, *Onycha*, *Galbanum* and *Incense*.

1. STACTE. This drug is understood to be the prime kind of myrrh; but the original word for myrrh is not used here, but another, *Nataph*, (נֶטָפִי), which properly signifies a drop. Mr. PARKHURST thinks it is myrrh distilling—dropping—from the tree, of its own accord, without incision. The LXX. read ΣΤΑΚΤΗΝ; Vulgate, *Stacten*; but SCHEUZER thinks it was balm or balsam, which is properly a drop.

2. ONYCHA; so read most interpreters; LXX, *Onyx*; Jerom, *Onyx*. This is understood to be a shell of an excellent fragrance. The Arabic writers often speak of this shell. *Dioscorides* says, it is found in the Indies, in those marshes where the nard grows, which imparts its scent to the shell. It has a good odour when burnt. *Rumphius* in his "Rarities of Amboyna," lib. ii. cap. 17. describes the odoriferous nail or onyx, to which he gives the name of (שִׁחֹרֶת,) the Hebrew word employed in this passage. He informs us that this shell is a covercle of the *Purpura*, and of the whole class of the *Murex*; adding, that in the Indies this *onyx* serves as the basis of all perfumes. This writer describes ten kinds of these shells, and gives as synonymes to his No. 10, *Unguis odoratus*, *Onyx marina*, *Blatta Byzantina*; Arab. *Adfar-altibi*. Under the former of these names it is known in Europe, and, I think, is known also among our apothecaries in England.

3. GALBANUM.—Galbanum, says *Dioscorides*, is the juice of a plant named *Ferula* or *Metopium*; it grows in Syria. The most excellent resembles incense, is cartilaginous, pure, fat, without being woody; of a strong smell. *Hermannus* says, it is gummy, resinous, fat and pliable like wax; a good deal like gum-ammoniac; its odour is aromatic, but strong.

4. INCENSE, or *frankincense*, of which *Pliny* speaks, lib. xii. cap. 14. and *Virgil*, Ecl. viii.

Verbenasque adole pingues, & mascula Thura.

"Burn vervain, and MALE incense." *Dioscorides*, lib. i. cap. 28. says "Male incense is named *Stagonias*; its grains are naturally round, and do not split; when broken, they are white within, and fat; and catch instantly, on being thrown into a fire." There are several kinds of incense: that which is brought over in masses is Indian, (*Indicum*;) that which is in tears is *Mammosum*, female; and that which is in grains is *Masculum*, male.

It appears, that the chief of these drugs are vegetables; and that there is no oil, nor animal fat, used with them: they appear to be of a dry kind.

We ought not to quit this subject, without observing that there is an allusion to the ingredients of this sacred perfume in *Ecclesiasticus*, xxiv. 14. "I yielded a pleasant odour like the best myrrh, as galbanum, and onyx, and sweet storax, and as the fume of frankincense in the tabernacle." We have, therefore the testimony of this writer for the correctness of several drugs proposed above; but how is it that a perfume, forbidden to private persons, should be so nearly imitated? Had it lost its sanctity, or did the admission of another ingredient take away its peculiar sacredness?

AN
EXPOSITORY INDEX

TO THE BOOK OF

LEVITICUS,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER XI. VERSE 2.

ANIMALS CLEAN AND UNCLEAN.

THE custom of considering certain animals as proper for human food, and rejecting others as improper, is of so great antiquity, and of so general, not to say universal, adoption, that it well deserves our attentive examination, both with regard to its principles, and to their application.

We read Gen. vii. 2. of Noah's receiving into his ark a greater number of clean beasts than of unclean; and we know that the *Puranas* of India express the same distinction, in their history of the general deluge. Add to this, that the *Bramins*, from the deepest antiquity, have been prohibited from certain kinds of food: also that the Egyptians adopted the same restrictions; and we shall perceive that this observance must have originated in a strong sense of propriety, if not rather of absolute necessity.

Vegetables, no doubt, were the primitive food of mankind; but all vegetables were not equally fit for food; even in Paradise, there was, at least, one of malignant properties; and in other parts of the earth there were, as there now are, many whose noxious qualities render them utterly unfit for reception into the stomach; as indeed they are incapable of affording nutriment to the body.

In like manner, among animals, the flesh of some when eaten furnishes a wholesome nourishment, while the flesh of others is poison. Nature itself has prohibited these last from our tables; since no man would risque his life, or his health, in the use of them, were their appearance or their relish ever so attractive. What benefit could possibly be derived from attempting to use the *Gecko* as food? Vide on Deut. xxx. 32.

We must also consider the different natures and modes of life among animals: some are domestic, and feed on vegetables; others are savage and feed on flesh. Those which feed on vegetables are capable of becoming the property of mankind, and of being domesticated; are always at hand, and ready for use; whereas those which prey on others, are distant, and injurious; and the opportunities of procuring them for service when wanted are altogether accidental and uncertain.

Of animals which are capable of domestication some may be more proper for food than others; it may be more advantageous to employ some in labour, than to feed on them: and others may be, during their whole lives, engaged in procuring food for man, to greater advantage than if they themselves should be slain and eaten; which could furnish but an occasional supply.

It is every way probable, that after the qualities of creatures were understood, after the wild and savage were banished from around the habitations of man, while the tame and the gentle were taken under his protection, and multiplied by his care, that the passions or the dispositions of the human mind, were figuratively expressed by comparison to the characters of animals; and that distinctions, drawn from the fierceness of the lion, or the meekness of the lamb, were employed to convey instruction to the understanding, and to regulate the manners of life.

Having thus hinted at those causes which originally led to a difference in the use of creatures, so far as concerned the article of food, and the subsequent employment of their characters by way of morals, placing first that which is natural, and afterward that which is spiritual: we shall proceed to examine those distinctions which Moses recorded, and

and adopted for the people of Israel, under the influence of divine direction. It will be remembered, that we are discoursing not as theologians, but as naturalists; and nothing beyond this character is to be expected from us.

Among quadrupeds, *Whatever*, 1. *parteth the hoof*, 2. *is cloven footed*, 3. *cheweth the cud*, that ye may eat.

We must consider this precept as addressed to the whole of the nation; and therefore its import, in order to insure obedience, must be obvious and direct. Nothing is more conspicuous than a cloven hoof; and nothing better known than the creatures which have this conformation; but the action of *chewing the cud*, or *rumination*, is not so evident.

Quadrupeds may be divided into two classes: *first*, those which have hoofs; *secondly*, those which have claws.

In the first class, the extremity of the foot is wholly covered with a hard horny substance; on which, when the animal stands up, he rests his weight, either in whole or in part. The second class, or those with claws, do not rest any part of their weight on their claws; neither is the whole extremity of their foot covered by their claws, but only certain portions of it.

Animals having hoofs are again divided—into those of one solid hoof, only; and—those with divided hoofs: the latter are the subjects of our present observations. The Hebrew text is, emphatically, “dividing the division of the hoofs;” meaning an entire and total separation of the hoof into two parts; and meaning also, neither more parts nor less than two. Hence the camel, whose hoof is *partly* divided, was unclean to the Jews, though it is eaten by the Arabs; and the *arnebeth*, (hare), having more than two divisions, though described as ruminating, yet was forbidden.

RUMINATION is an action of the gullet, whereby certain quadrupeds bring again into their mouths that food which they had taken down into their stomachs; they repeat this slight kind of vomiting for the purpose of re-chewing their food, grinding it into more minute parts, and mixing it more intimately with those salival juices which are furnished by the mouth. This they repeat several times; till the vegetable substances on which they have fed, are become sufficiently prepared to be converted by digestion into flesh. It must ever be remembered, that there is by much, a greater dissimilarity and distance between a vegetable, designed to be used as aliment, for the purpose of conversion into flesh, than there is between any kind of flesh which is meant to be converted, as aliment, by the process of digestion, into flesh of another kind; thereby forming part of another animal.

Ruminating animals have several stomachs, wherein the food is prepared in different degrees, before it passes away as being wholly digested. The first is called the *paunch*; this is the most copious: here the food is received, softened by being soaked in a proper liquid, and is ground, preparatory to being passed into the second bag or ventricle.

The second stomach is called the *honey-comb*, being composed of cells like that structure of the industrious bee, to which its name alludes: this discharges the food in some degree from its moisture, and dismisses it to the third stomach.

The third stomach is called the *many-fold*; and consists of many *cellular membranes*. In this receptacle a further progress is made in digestion,

The fourth stomach is called the *honey-tripe*: the juice furnished by this ventricle completes the preparation of the food, and dismisses it, as entirely fit for the purposes of nourishment.

VERSE 4.

THE CAMEL.

The foot of the camel is only partially divided; that is to say, the division is not entire throughout; he cannot therefore be said to have hoofs. This animal then, though ruminant, is unclean, because he does not, “divide the division of the hoof,” as was the characteristic mark required in a clean beast.

The camel forms a part of the most sumptuous entertainments in the East; and is reckoned, especially the young ones, among the most savoury dishes.

VERSE 5.

THE CONEY, or SHAPHAN.

Vide on Proverbs xxx. 26; the *Ashkoko* of Mr. BRUCE, and the plate. That traveller tells us, “he certainly chews the cud;” but he has toes, not hoofs.

VERSE 6.

THE HARE, *Arnebeth*, Heb.

The difficulty on this animal is, that Moses says the *Arnebeth* chews the cud, which hares, say some, do not; and of which we have no ancient testimony in respect to the hare. Either then, this word means a creature of the hare kind, not known among us in Europe, or the hare of Asia does more or less ruminant. Both these ideas may be correct; the *Arnebeth* of Moses may be of this kind, yet a different creature from our hare; and it may ruminant. Nevertheless, we must remark that interpreters are agreed that the creature meant in this passage is the hare; and the Arabs at this day call the hare *Arneb*, *Erneb*, *Eraneb*. Mizinzk. Lex. 151. 3144. The lxx however translate *Δασυπους*, (*Dasypous*,) which Aristotle, lib. i. cap. 1. and Pliny,

Pliny, lib. viii. cap. 55; lib. x. cap. 63. seem to describe differently from the hare. Bochart, and the lexicographers, however think the hare is really designed by this word. [Are there any traces of our *guinea-pig* here?]

In support of the opinion of Moses, on the rumination of the hare, it may be proper to adduce *modern* testimony. In Dr. Shaw's excellent work on General Zoology, a very curious particular is related respecting these animals. He informs us, that when Hares are considered with anatomical exactness, they exhibit some peculiarities of structure, by which they make an indistinct approach to the ruminating animals; and that the Common Hare is, by many persons, supposed actually to ruminate. This opinion has been derived not merely from the peculiar motions observable in the mouth, which presents an obscure appearance of rumination; but from the structure of the stomach, which is marked, as it were, into two regions, by a particular fold or ridge.

The late Mr. Cowper speaking of a hare which he kept says, "Finding him extremely tractable, I made it my custom to carry him, always after breakfast, into the garden, where he hid himself generally under the leaves of a cucumber vine, sleeping or CHEWING THE CUD till evening: in the leaves also of that vine he found a favourite repast."

Hares were, and still are very common in Judea, and even in the deserts: they are indeed so plentiful, that Plaistead advises those who are about to cross the deserts towards Bussorah to take onions with them, in order to make a sauce for the hares they may meet with; whence it appears, that this animal is partly depended on as a resource for food. He mentions knocking down 20 or 30 in a day. These hares, living in the desert, not in the verdant meadows of Europe, may they *ruminate* under these circumstances, more distinctly than our own? or, are they of a kind not precisely the same as those of our country?

N. B. The hare was forbidden food among the Britons; no doubt directed in this instance by the Druids. From a hint, Prov. xii. 27. Mr. HARMER thinks the Israelites did not always refrain from the hare.

VERSE 7.

THE SWINE.

This is clearly the creature designed by the sacred writer. The well-known aversion of the Jewish nation from it, and the abhorrence of other families of mankind, arising even to detestation and a proverb, mark it decidedly as impure. This creature, in hot countries, is apt to be troubled with distempers, which render its flesh unwholesome; to which may add, its perpetual wallowing in mire. We have no reason to doubt but its natural qualities were known before it became a symbol, or a proverb of impurity.

Tacitus tells us, that the Jews abstained from the flesh of swine, in consideration of a leprosy by which they had formerly suffered, and to which this animal has a disposition. Maimonides, (*More Nevochim*, part iii. cap. 8.) says, "The principal reason wherefore the law prohibited the swine, was because of their extreme filthiness, and because this creature eats so many impurities. For it is well known with what care and precision the law forbade all filthiness and dirt, even in the fields, and in the camp, not to mention the cities. Now had the swine been permitted, the public places, and the houses, would have been worse than dunghills, or even than privies."

Plutarch, (*de Iside*) affirms, that those who drink of the milk of the sow become blotchy and leprous; and Elian, (*lib. x. cap. 16.*) quotes from Manetho, that whoever drinks sow's milk is quickly covered with scabs and leprous itches. How very applicable the moral of these accounts is, needs not to be insisted on.

VERSES 9, 10, 11, 12.

OF FISHES CLEAN AND UNCLEAN.

You may eat of whatsoever hath fins and scales.

Fins are analogous to the feet of land animals; as therefore, the sacred legislator had given directions for separating *animals* according to their hoofs and claws, so he directs that *fishes*, which had no clear and distinct members adapted to locomotion, should be unclean; but those which had fins should be clean, provided they also had scales: for as we saw before that *two* requisites, a cloven hoof, and a power of rumination, were necessary to render a quadruped lawful, so *two* characters are necessary to answer the same purpose in fishes.

The manner in which this law is given, its replication, and its extent, deserve notice. There are no particular kinds of fish specified as pure or impure; but a general rule is laid down, that only those answering to such a description, may lawfully be used. The reason, perhaps, is, that fishes were likely to form no considerable part of the food of the Israelites, who were to be an agricultural people; but if any were purposely bred by them, or found in their fresh waters, &c. they should be such as were free from hazard, as well in regard to health, as to the exertion necessary to procure them.

It deserves notice also, that there are no exceptions made, as in the case of animals; a strong line of distinction, of *permissive* distinction is drawn; and this being attended to, there is no risque of failure in that compliance which the law demands. On one occasion, NIEBUHR asked a Jew, "whether such or such fishes were lawful?" who answered him, that the law allowed them so many that were beyond denial fit for their use, that he had never troubled himself to inquire into the lawfulness of any that were dubious or uncertain.

It

It is not in the Scripture only that this distinction among fishes is known. The Romans ate in their sacred festivals, which they called *Polluctum*, only those kinds of fishes which had scales. *Pliny*, lib. xxxii. cap. 1. after *Cassius Hemina*, reports this as an express law of Numa. *Porphyry*, (*de Abstin. lib. ii. cap. 37.*) says, that the Egyptian priests held fish in abhorrence: *Herodotus* says the same, (*lib. ii. cap. 37.*) This, however, may be doubted; as the priest who had the care of the temple of Isis at Herculaneum, when that temple was involved in ruin, by the ashes of Vesuvius, was found with the remains of fish on which he had been feeding, lying before him. It is admitted, that fishes were freely used by the Jewish commonalty; and we find they had been used as food by the Israelites in Egypt; since they regret the loss of them. *Numb. xi. 5.*

VERSE 13.

OF BIRDS.

There are no particular characters given for distinguishing birds by classes, as clean or unclean; but a list of exceptions is tendered, and these are forbidden, without enumerating those which are allowed.

It will be found however, on consideration, that such as live on grain are not prohibited; and, as these are the domesticated kinds, we might almost express it in other words; that birds of prey, generally, are rejected, *i. e.* those with crooked beaks, and strong talons; whether they prey on lesser fowls, or on animals, or on fish; while those which eat vegetables are admitted as lawful; so that the same principle is maintained to a certain degree, among birds, as formerly among beasts.

THE EAGLE.

This bird is well known, as taking a kind of pre-eminence among birds of prey. There is no difficulty in determining the bird intended.

The OSSIFRAGE. Interpreters are not agreed on this bird: some read *vulture*, others the *black eagle*, others the *falcon*: the name *Peres*, by which this bird is called in the Hebrew, denotes *to crush*, *to break*; and this name agrees with our version, which implies "the bone-breaker." This name is given to a kind of eagle, from its habit of breaking the bones of its prey, after it has eaten the flesh; some say also, that he even swallows the bones thus broken.

Onkelos uses a word which signifies *naked*, and leads us to the *vulture*: indeed, if we were to take the classes of birds in any thing like a natural order, in the passage before us, the vulture should follow the eagle as an unclean bird. The Septuagint interpreter also renders *vulture*: and so do *Munster*, *Schindler*, and the *Zurick* versions.

The OSPREY. The Hebrew name of this bird is derived from a root signifying *force* or *impetuo-*

sity; it may therefore be the *osprey*: but there is much reason to doubt whether we are correct, in applying these different kinds of eagles, for such they are to which we have been now attending.

The probability is, that this is the *Haliæetus*, or *sea-eagle*: or, perhaps, the black eagle; which, though among the smallest of eagles, is among the strongest. So Homer speaks, Il. xxi verse 252. "Having the rapidity of a black eagle, (*μελανος*), that bird of prey which is at the same time the strongest and the swiftest of birds." I do not know how far I am justified in referring to the black eagle of BRUCE, vol. v. p. 159, which he names *Nisser Tokoor*; but if we had better acquaintance with that bird, perhaps it might prove to be the *Atznieh* of this passage.

If the above hint be admissible, then the vulture, distinguished by its bald head and neck, is excluded, on one side; while the class of eagles which have a superfluity of feathers on the throat and head, are excluded on the other side. Of these BRUCE offers two, the *Nisser Werk*, p. 155. which has a kind of beard of feathers under his chin; and the *Nisser Tokoor*, which has a long crest, or tuft, on the back of his head. See the Plate at the end of the dissertation on Lev. xi. 13. &c.

The VULTURE.—This word appears in this place written with *ר*, *Daah*, (*דאח*) but in Deut. with *ר*, (*דאח*) *Raah*: if the first of these be correct, it leads us, not to the *vulture*, but the *hawk*; as the import of it is the *swift* or *rapid*; and this is countenanced by the Samaritan version, which reads *Daitah*. If this be admitted, it tends much to support the opinion, that the second eagle of the list is the vulture; since the vulture could hardly be omitted in this list, and its proper place among its associates should seem to be earlier than this.

As modern naturalists, this is the proper place where we should expect to find the hawk; and the order is so natural, that little seems to be risked in supposing that it was adopted even in the days of Moses; for, though we are well aware that we must not judge of the natural history of that ancient writer by the principles of the *Linnæan* system; yet where nature has appointed an order, as we may safely say, in this instance, what should forbid the earliest of naturalists from observing it?

In favour of the hawk are *Jerom*, the *Arabs*, *Munster*, *Castalio*, *Junius*, *Diodati*, *Buxtorff*, *Schindler*, and others.

VERSE 14.

The KITE.—This follows the hawk with propriety. The Hebrew name implies *rapacity*; and this agrees well with the kite. As there are several kinds of these birds, we shall not particularize any; no doubt but all their classes were meant to be included under one name that was best known. The person who should have eaten one species of eagle, or of hawk, because another species

species was named in the text, would have found the consequence of his transgression in the punishment of his prevarication.

Every RAVEN, after his kind.—This genus no doubt includes the *crow*, the *pie*, &c. and therefore, coming after the hawk and kite, closes this list of birds of prey with great propriety.

It will be observed that the foregoing birds are birds of wing, *high-flyers*, such as roam to great distances, and prey wherever they can. Mr. BRUCE describes multitudes of birds as following the armies in Abyssinia; and I should think it likely that among them would be found most, or all of those enumerated above. Perhaps they are not only birds of prey, but they feed on *human* carcases; which would be a further cause of their pollution and unfitness.

VERSE 16.

We are now directed to a very different class of birds, which commences with—the *owl*, say our translators; but this is clearly a mistake: the word describes “*the daughter of screams*,” i. e. the OSTRICH. See this confirmed in FRAGMENT, No. cxliv. p. 92.

Is it not astonishing that this bird should have been described as, 1. The *Ostrich*, by the lxx; 2. *Sirenes*, which bird is apparently a creature of fancy; 3. The *owl*; and 4. The *nightingale*.—What have these birds in common, that can justify such variations? The three Chaldee versions, *Onkelos*, *Jonathan*, and the Jerusalem Paraphrase, read *Naamah*, which is the Arabic name for the Ostrich: *Maimonides* and the *Talmud* agree with them.

The NIGHT-HAWK.—That this is a voracious bird seems clear from the import of its name; and interpreters are generally agreed to describe it as flying by night. On the whole, it should seem to be the NIGHT OWL, *Strix Orientalis*; which *Hasselquist* thus describes: “It is of the size of the common owl, and lodges in the large buildings or ruins of Egypt and Syria, and sometimes even in the dwelling-houses. The Arabs settled in Egypt call it *Massasa*, and the Syrians, *Banu*. It is extremely voracious in Syria; to such a degree, that if great care is not taken to shut the windows at the coming on of night, he enters the houses and kills the children: the women, therefore, are very much afraid of him.”

The CUCKOW.—The strength of the versions is in favour of the *sea-mew*; the original name may denote a *slender* bird; but the *sea-mew*, as a water bird, seems to be very ill placed in this part of the list: I should be almost tempted to adopt the notion of Dr. SHAW, which I transcribe below, but that I do not see wherefore a granivorous and gregarious bird should be excluded; can his want of the hinder toe be a sufficient reason? I hardly think it. TRAVELS, p. 252. fol. edit.

“The *Rhaad*, or *Saf-saf*, is a granivorous and gregarious bird, which wanteth the hinder toe. There are two species of it; the smaller whereof is of the size of an ordinary pullet, but the larger is near as big as the *Hoobaara*, differing also from the lesser in having a black head, with a tuft of dark blue feathers immediately below it. The belly of them both is white, the back and the wings of a buff colour, spotted with brown; whilst the tail is lighter, marked all along with black transverse streaks. The beak and the legs are stronger than in birds of the partridge kind. *Rhaad*, which denotes thunder, in the language of this country, is supposed to be a name that hath been given to this bird from the noise it maketh in springing from the ground; as *Saf-Saf*, the other name, very naturally expresseth the beating of the air, when it got upon the wing.” “*And is not unlike in name to the Sahaph, or Sah-haf, which, Lev. xii. 10. we translate cuckow.*” Note.

Dr. GEDDES renders, “the horn-owl;” but is this distinct enough from the foregoing?

The HAWK, after his kind.—This bird seems to be strangely placed here; we had *kites* of all sorts in verse 14; now, after the *ostrich*, and *owl*, birds of no flight comparatively, we have the *hawks*, a genus much more likely to have been included before, following the eagles and vultures.

I have no determinate opinion on the species of this bird; can it be the Ibis? That bird, so common in Egypt, could hardly be omitted in the list. Can it be the *plover*? *Hasselquist* mentions the plover of Egypt, and the three-toed plover. We should seem to want a wild bird.

If Mr. Bruce’s *Abou Hannes* (vol. v. p. 172.) be, as he supposes, the ANCIENT IBIS of Egypt, perhaps the Hebrew name *Netj*, is still appropriated to it; for *Abou* is merely the Arabic word for *father*, and *Ha-nes* resembles the Hebrew name used in this passage, q. *ha-netj*.

Mr. Bruce begins his account of the *Abou Hannes* by saying, “The ancient and true name of this bird seems to be lost; the present is fancifully given to it, &c.”—Perhaps it is rather disguised than lost; but this is conjecture, and nothing more.

This bird is not now found in Egypt, though anciently it was worshipped there, and was very numerous; it is therefore not the *Ibis* of *Hasselquist*. I suspect that the Arabic title, *father*, is some remain of the ancient idolatry, of which this bird was the object.

VERSE 17.

The LITTLE OWL.—Such is the translation of the lxx, *Aquila*, *Theodotion*, and *Jerom*; but why should the *owl* be introduced here? he was named in the former verse. Our translators seem to have thought the owl a convenient bird, as we have *three* owls in two verses. Among the Rabbins, some have thought this bird to be the *pelican*, and Bochart

chart takes pains to prove it. Dr. GEDDES thinks, this bird is the *cormorant*, and that the following is the sea-gull: as I rather take the following for the cormorant, I should incline to render this the sea-gull. This begins the list of water-birds, whatever bird it be.

THE CORMORANT.—Dr. GEDDES renders, the “sea-gull;” and observes, “That this is a *plunging* bird I have little doubt. Some modern critics think it is the *Pelican Bassanus* of Linnæus. The Chaldee and Syriac version, *fish-catcher*, favours this rendering; nor less the Greek *Cataractes*, which, according to Aristotle, draws for its food fishes from the bottom of the sea.” I think, this is a clear description of the cormorant, which certainly is one of the best of *plungers*; and which lives wholly on fish: moreover, this bird in some parts of Asia is used as a *fish-catcher* for its master; who, by putting a collar round its neck, prevents it from swallowing the fish it has caught, which the bird, therefore, brings to the boat, and is afterwards fed with a part of its prey. To this bird also agrees the description of Aristotle. Suidas says, “the *Cataractes* is a kind of sea-bird;” Aristotle adds, “smaller than a hawk.” Appian (*in Ixeuticis*) describes the *Cataractes* exactly according to the manner of the *gannet* on the coast of Scotland. At any rate this is meant for a water bird; and therefore demonstrates the impropriety of the preceding and following bird being rendered “owl!”

THE GREAT OWL.—This is strangely placed, after the *little owl*, and among water-birds. The lxx render *Ibis*; and this seems to be a very proper place for the *Ibis*; which yet, I suppose, is not the *ancient Ibis* of Egypt, but that which in later ages received this name. The following is *Hasselquist's* account of this bird. “*Ardea Ibis*: This bird is about the size of a raven-hen. It is found in Lower Egypt, especially in places not overflowed by the Nile; and at length in those from which the water is withdrawn. He feeds on insects and small frogs, which abound in Egypt, both before and after the inundation of the Nile; in which he is of great service to the country. They assemble morning and evening, especially in the gardens, in such great numbers, that the palm-trees are covered with them. When he reposes himself, he sits upright, so as to cover his feet with his tail, and to straighten his neck and breast.” As a bird of this character and description, suits the situation assigned him in this place, I should think him preferable, at any rate, to “the great owl.” Mr. PARKHURST, admitting that it should be of the *Ibis* kind, supposes it may be the *bittern*, from the *droning* noise which that bird makes by blowing, which is one of the significations of the root of its Hebrew name.

THE SWAN.—This bird, in Hebrew *Tinshemet*, is extremely doubtful: the lxx render *Porphyron*,

or *purple hen*, which is a water-bird, not unlike in form to those which have preceded it. His name is derived from his general colour. Dr. GEDDES observes, that “the root signifies to *breathe out*, to *respire*. If etymology were our guide, I would say it points to a well known quality in the swan, that of being able to respire a long time with its bill and neck under water, and even plunged in the mud.” Mr. Parkhurst thinks, the conjecture of Michaelis not improbable, “that it is the *goose*, which every one knows is remarkable for its manner of *breathing out*, or *hissing*, when provoked:” or even when under a small degree of apprehension, without being provoked. Michaelis observes, p. 221. “What makes me conjecture this is, that the same Chaldee interpreters, who, in Leviticus, render *Obija*, do not employ this word in Deuteronomy, but substitute “the *white Kak*,” which, according to Buxtorf, Dict. p. 2107. denotes the *goose*.” Perhaps Egypt has birds of the wild-goose kind; one of which is here alluded to. Norden, vol. ii. p. 36. mentions, “a goose of the Nile, whose plumage was extremely beautiful. It was of an exquisite aromatic taste, smelled of ginger, and had a great deal of flavour.”—Can a bird of this kind be the Hebrew *Tinshemet*?

THE PELICAN: in Hebrew *Kaat*, and in the Eastern versions, *Kik*, *Kok*, or *Kak*. As the preceding bird was called the *white kak*, it seems to suppose a similarity between that and this, though it infers a difference of colour. The Talmud describes it as a water-bird, with a long neck; the lxx read *palecas*, and the Vulgate, *onocrotalus*; on the whole this bird is pretty well determined.

THE GIER-BAGLE. No eagle is a water-bird; for this reason, were there no other, in this list of water-birds, we ought not to expect to find an eagle. Most interpreters are willing to render the Hebrew word *Racham* by that kind of Egyptian vulture which is now called *Rachami*, and is abundant in the streets of Cairo. *Vultur percnopterus*. The description which *Hasselquist* gives of this bird is horrible; but, especially, it does not agree with a *water-bird*, which is what we want: “It is hardly ever seen in the fields, or around the lakes: it is an impure bird, and a carrion-eater.” Mr. PARKHURST wants a water-fowl; and Dr. GEDDES says, “It is not easy to conceive how this bird came by its name, *Racham*.” But I think by tracing it, we may advance some way toward ascertaining this bird. Jonathan and the Syrian interpreter translate, *Serakreka*; Onkelos, *Jerakreka*; the Talmud, *Serakrak*. Meninski, in his Lexicon, mentions a bird named by the Arabians *Sirikrak*, *Sikirrak*, &c. It is not of the *pie* kind, though so understood by Meninski. I observe Dr. SHAW mentions, “the *Shaga-rag*, of the bigness and shape of a jay, though with a smaller bill, and shorter legs. The back is brownish; the head

head, neck, and belly of a light green; and upon the wings and tail there are several spots or rings of a deep blue. It makes a squalling, and *builds in the banks* of the *Shelliff, Booberak, and other rivers.* This description approaches to that of the *King-fisher* or *Alcyone*: the name is sufficiently near to that of the versions; and if the *Alcyone* may be supposed to be the *Racham*, we see at once that it is a water-bird; and the histories of this bird's tender affection unite in the character of the *Racham*. "The king-fisher frequents the banks of rivers, and feeds on fish. To compare small things with great, it takes its prey after the manner of the osprey, balancing itself at a certain distance over the water for a considerable space, then darting below the surface, brings the prey up in its feet. It makes its nests in holes in the sides of the cliffs. The nest is very foetid, by reason of the remains of fish brought to feed the young." Vide PENNANT'S *British Zoology*, vol. ii. p. 247. See Ovid, *Metam.* lib. xi. for the tenderness of the *Alcyon*, and Theoc. *Idyll.* vii. 57. Virg. *Georg.* iii. 338. Silius Ital. lib. xiv. 275. No doubt there are several kinds of *Alcyones*; that some are known in Egypt we are informed by *Hasselquist*, who gives this account of them: "*Alcedo rudis*, frequents the banks of the Nile, and takes the fish by thrusting his long bill into the water like the gull. *Alcedo Egyptia*, is found in Lower Egypt, makes his nest on the date-trees, and the sycamores, which grow around Cairo. Feeds on frogs, insects, and fish, which it finds in the fields. Its voice resembles that of the raven." Without determining on the probability of this conjecture, I think we may be sure that the *Rachami* of Cairo is not the *Racham* of Moses; as a bird so well known, and hardly capable of being lost, would certainly have been acquiesced in by commentators, had it been the bird designed, notwithstanding the remarks of BRUCE, vol. v. 163, &c.

The STORK. It is pretty well agreed that the Heb. *Chasidah* is either the *stork*, or the *heron*; the *stork* is by much the most probable; and indeed, as the heron is not a bird of passage, which the stork is well known to be, I think we may acquiesce in this bird as the *Chasidah*. Vide PARKHURST, Dictionary, p. 253. 4to.

The HERON. This bird should rather be included among the storks, as it resembles them closely. As commentators are quite at a loss on this subject, insomuch that Dr. GEDDES retains the original word, "*Anaphas* of every kind," I shall be excused if I extract from Dr. SHAW the description of a bird which answers to what the passage and order requires. It is probable some bird very near akin to this is what was designed by the sacred writer.

"The *Boo-onk*, or long-neck, is of the bittern kind, somewhat less than the lap-wing. The neck,

the breast, and the belly are of a light yellow; but the back and upper part of the wings are of a jett black. The tail is short; the feathers of the neck long, and streaked with white, or a light yellow. The bill, which is three inches long, is green, in fashion like to the stork's; and the legs, which are short and slender, are of the same colour. In walking and searching for food, it throweth out its neck seven or eight inches; from whence the Arabs call it *Boo-onk*, the long neck, or the father of the neck."

This is reckoned by the Dr. among water-birds: it seems to be a smaller bird, but allied in form and manners to the kinds under prohibition.

The LAPWING, or the UPUPA. This is pretty generally considered as the bird designed by the original word *Dukiphath*, so called from its crest. It seems, that the Egyptians call the Hoopoe, *Kukupha*, and the Syrians, *Kikupha*; which is near enough to the Hebrew *Dukiphath*; which, therefore, we conclude is the Hoopoe.

The BAT. This rendering has the authority of most versions, and commentators.

The number of birds prohibited is twenty. For the sake of shewing the correct natural order in which Moses has placed them, we shall range them systematically; as it will prove that the system of Moses was that of nature: we have distinguished those which we have tolerable authority to imagine are correctly rendered, by writing them in small capitals.

BIRDS OF THE AIR.

Eagle	EAGLE.
Ossifrage	VULTURE.
Ospray	Black Eagle.
Vulture	HAWK.
Kite	KITE.
Raven	RAVEN.

BIRDS OF THE LAND.

Owl	OSTRICH
Night Hawk	NIGHT OWL.
Cuckow	Saf-saf.
Hawk	Ancient Ibis.

BIRDS OF THE WATER.

Little Owl	Sea-Gull.
Cormorant	CORMORANT.
Great Owl	IBIS <i>Ardea</i> .
Swan	Wild-Goose.
Pelican	PELICAN.
Gier Eagle	<i>Alcyone</i> .
Stork	STORK.
Heron	Long-neck.
Lapwing	HOOPOE.

Bat	BAT.
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By

By tracing the order and distinctions of these birds, the reader will be very well able to judge of what nature they are, by that of their associates: we shall not enlarge, as we might, on this article, but merely express our satisfaction at explaining, and, we hope, justifying, the order and the system adopted by this very antient Hebrew naturalist.

VERSE 20.

"All fowl that creep, going upon all four, shall be an abomination unto you. Yet these ye may eat of, every flying creeping thing that goeth upon all four, which have legs above their feet, to leap withal upon the earth." This passage is surely expressed with sufficient obscurity: *fowl—going on all-four—flying, creeping—legs above their feet!*

Observe, 1. The word ALL is here taken with restrictions, since some are excepted. 2. The word rendered "*fowl*," should have been rendered—a *creeper*, or *crawler*; the present expression gives us the idea of a bird. The passage would read thus literally. "*All winged reptiles, or creepers having wings, walking on four feet, are abomination to you: But yet, these ye may eat, from among all winged creepers going on four, those which have in them JOINTS, (כרעים, caroim,) at the upper part of their hind legs, (רגלי, regeli,) for the purpose of leaping from off the earth.*" This means to describe the locust, &c. (ארבה, *arbah*.)—These parts of the locust had exercised the critical enquiries of *Michaelis*, (*Quest. xxx.*) which *Niebuhr* answered, by information, that "*Arbah* is the name at *Bagdad*, and at *Maskat*, of those locusts of passage, which devour all that they meet with, and then go further. (חגב,) *Chagab*, is also a locust known at *Maskat*. *Rijelin* are the two hind legs. *Kirraim* are the joints." By these terms I understand the joints of the hinder leg, those very conspicuous ones which unite the muscular thigh with the slender leg. The distinction I presume is this, the locust has usually, beside his wings, six legs; four for crawling, and two for leaping: such as may have four legs only, are forbidden; since they only creep with such feet, though they also fly with their wings: but if they have two hind legs also, with which they leap, then, since they leap and fly, as well as creep, they are allowed. It will follow, that the locusts named in the following verses have six legs. This principle excludes other insects, flies, &c. which use their two fore feet as paws, but do not leap with any.

The locust, after his kind; the bald locust, after his kind; the beetle, after his kind; the grass-hopper, after his kind.

1. The locust, *Arbah*, (ארבה.) This is, as *NIEBUHR* observes, the migratory locust.

2. *Salom*, or *Solam*, (סלם.) Perhaps, as this

name implies, a *rugged* or *craggy* form. It is clearly a species of locust: but *Golius* thinks it is a locust before its wings appear; so that this, (as the others) rather describes a state than a species.

3. *Chargol*, (חרגל.) There is a story that this locust fights against serpents; and such is the import of its name in the Greek, *Οφιομαχος*; but the foundation of this appellation in the nature of the creature is not known.

4. *Chagab*, (חגב.) A species of locust, says *Niebuhr*.

Without being able to identify the kind of each of these locusts, we may perceive that our translation errs in rendering, "the beetle." As to rendering the "grass-hopper," certainly that insect is the natural representative of the locust tribe in our island. Several kinds of locusts, and probably the very kinds mentioned above, though we are unable to appropriate them, are eaten by the Arabs; who broil, boil, fry, or stew them. They are brought to market regularly, in baskets, bags, &c. &c. in a dried, or salted state, &c. in vast quantities; as we do shrimps, or prawns, &c.

Locusts are not absolutely unknown in England; as they are in some summers found on our coast counties, but happily in so feeble a state as not to be capable of leaving posterity behind them.

VERSE 29.

The WEESEL. Most versions and commentators have been content to render the Hebrew *Choled*, by *weesel*; but *Bochart* thought it was the mole; observing, that the Syriac *Chuleda*, the Turkish *Chuld*, the Arabic *Chold*, all signify the mole: which also is called *Khuld* at Aleppo. *RUSSELL*, p. 182. vol. ii.

The MOUSE, *Achbar*. [*JERBOA*, Prov. xxx. 26, see the Plate.] This being an animal which burrows in the ground, it is likely that it should be pretty much assimilated to the creature which precedes it.

The TORTOISE. All who know the tortoise know that it partakes of the nature of the *amphibia* too much to be, with propriety, placed among those creatures with which we here find it associated. *Dr. SHAW* tells us, "the *Tjab*, (צב,) of this passage is a kind of lizard called in Arabic, *Dab* or *Dhab*; it agreeth nearly in the shape, and in the pointed *annuli*, or scales of the tail, with the *caudiverbera*," or shake-tail. With this idea the *lxx* agree, who call it the "land crocodile;" the Vulgate, "crocodile," simply. The great crocodile it certainly is not; but from the circumstance of its figure, a lizard only, not a *tortoise*, could have received this name. *Bochart*, *Damir*, and *Avicenna*, countenance the opinion of *Dr. SHAW*.

The FERRET. *Dr. GEDDES* renders this the *Newt*. According to the import of the Hebrew word, its name seems to be taken from the cry it emits;

emits; and this is supposed by the generality of interpreters. "The Hebrews have named it *Anakah*, because of its *very sharp cries*, which might be mistaken for groans and moaning.—"If we examine the etymology of the Hebrew name, we shall find the *Anakah* is a *spotted* (or *starred*) lizard, which utters sharp cries." Pliny, lib. xxix, cap. 4. mentions the "*Galeotes*, covered with *red spots*, and its cries are sharp." I think the above descriptions are precisely those of the *Gekko*, (for the properties, manners, and form of that creature, vide Plate, on Deut. xxxii. 33.) and, as a lizard is clearly the kind of animal intended; and as besides the *Gekko*, few if any lizards, cry, that animal seems to be strongly hinted at here. I would further observe, that, as its name in the Indies, *Tockai*, and in Egypt, *Gekko*, is formed from its voice, so the Hebrew name *Anakah*, or perhaps, *Anakkah*, seems to be formed in like manner; the double *k* being equally observable in all these appellations. If these remarks are admissible, this lizard is sufficiently identified.

THE CHAMELEON. The rendering of *Coach* by *Cameleon* has the sanction of the lxx and Vulgate. Bochart prefers the *Gauril* of the Arabs; which is a *strong* lizard; and this quality is denoted both by the Arabic and the Hebrew word. It is said that this lizard fights against serpents, and even kills them sometimes; from whence the Greeks have given it a name. Its flesh is hot, and is reckoned very fattening, especially by the women; and, together with its blood, skin, &c. is used in medicine. Dr. SHAW names it "the *Warral* or *Guaral*, which, according to *Leo Afric.* lib. ix. is sometimes thirty inches in length; being usually of a bright reddish colour, with darkish spots."

THE LIZARD. As the companions of this creature are lizards also, this should have some mark of distinction. Bochart has made it very probable that this is a species of red lizard, called by the Arabs *Wachra*. Some take it to be the *Salamander*; to which, perhaps, it has some resemblance in shape and size, though not in colour.

THE SNAIL, Chomet. This is the rendering of many commentators, including the Rabbins; but the lxx and St. Jerom read *lizard*; and indeed the place rather requires a lizard than a snail. The Arabic versions have the *Cameleon*, or *Stellio*. According to the Talmudists, *Chometon* means *sand*; and Bochart seeks to answer the name, for a lizard which lives in sand, which he finds in the Arabian lizard *chulca*; whose colour is azure, and which is mentioned by Arab writers.

THE MOLE, Tinshemeth. This word rather denotes a lizard; and according to the signification of the root (נשם), *neshem*, to breathe, it applies peculiarly to the *Cameleon*, of which the story

went that it lived on air: and this, though not true, has been popular. Pliny reports, lib. viii. cap. 33. that "this is the only animal which neither eats nor drinks. He stands up, his mouth always open; and the air serves him as aliment." And the same, says Ovid, *Metam. lib. xv. 411.*

Id quoque, quod ventis animal nutritur et aurâ.

The *cameleon*, however, lives on flies and other insects. This lizard is so remarkable that it could not have been omitted in this list; and our translators have accordingly introduced it before, not without authority from lxx and Vulgate: but Dr. GEDDES remarks, "Here *etymology* is particularly favourable to the *cameleon*."

The following is a comparative arrangement of these forbidden creatures.

ANIMALS.

Weazel MOLE.
Mouse JERBOA, the lesser.

LIZARDS.

Tortoise The DHAB.
Ferret The GEKKO.
Chameleon WARRAL.
Lizard Red Lizard.
Snail Sand Lizard.
Mole CAMELEON.

VERSE 41.

And every creeping thing that creepeth on the earth shall be an abomination: that is to say, creeping insects of all kinds: *whatsoever goeth upon the belly*, i. e. serpents; *whatsoever goeth on all-four*, i. e. locusts, &c. and lizards; *whatsoever hath more feet, than four*, i. e. scolopendras, scorpions, &c.

In this verse the law is made general; yet there are, undoubtedly, serpents which are eaten as food;—the rattle-snake is reckoned a dainty by some persons in America; and many people in Egypt, &c. in a manner live on serpents. Lizards also are good; the *Guano* is hunted for its flesh, which is esteemed extremely delicate. And among insects, the palm-tree worms of Martinico are considered as exquisite; their flavour being exceedingly aromatic. These, however, are not sufficient to justify the character of the rest of their tribe. This general prohibition is founded on the most correct views of propriety; and on the *general* unfitness by nature of the creatures prohibited.

CHAPTER XIII. VERSES 2—28.

THE LEPROSY.

IN a former chapter the sacred legislator had distinguished between animals pure and impure, among other purposes designing that of preserving the health of his people; but in this chapter we find

find him supposing that certain of the most inveterate maladies to which the human frame is subject, might become the afflictions of individuals; and directing the proper procedure in such cases.

The leprosy, in all its stages, and under all its appearances, is one of the most calamitous of diseases. We, in Britain, are happily freed from it by the coldness of our climate, and therefore are not able to form just conceptions of its various distinctions, and their appearances, in the hotter parts of the globe.

The first disease mentioned is *seeth*—a rising; perhaps, a red *pustulous* rising; 2. a *scab*, or shining spot, or a pustule full of pus; 3. A *whitish spot*, without appearance of tumour. Perhaps these are only different states of the same distemper, which gradually assumes these more decisive and mature appearances. As the compleatest information I know of, I shall translate what NIEBUHR says on this subject.

“The Arabs have three sorts of leprosy: 1. *Bohak*, which is neither contagious nor deadly. A negro who was attacked by it at *Mocha*, was sprinkled all over his body with white spots; it was said that the use of sulphur had relieved him for a time, without curing him. 2. *Barras*, which also is not dangerous. 3. *Juddam*, or *Majuddam*. This leprosy is of the greatest malignity. According to the opinion of a Jew of *Maskat*, this is the same as is mentioned, Lev. xiii. 10, 11.; and a Jew of *Bagdad* believed this to be the disease named in Hebrew, (ירקין) *Jadakin*. *Juddam* is apparently what Hilary calls the leprosy of the joints; for when I enquired at *Bagdad* in what species of leprosy those signs which accompany the Arabian leprosy appeared, such as numbness of the fingers and toes, stinking breath, difficulty of breathing, swelling of the ears, cheeks, brows, &c.; they answered me that all these signs, together with the falling off of the nails announced the *majuddam*.

The *Schech*, who governed at *Aboushar*, sent into the island of *Bahrein* those who were attacked with the species of leprosy called *Abbras*.—[*Barras*?] Some few years ago all the leprous persons at *Basra* were shut up in a separate house; and there is at *Bagdad* a quarter enclosed, and filled with barracks, to which the magistrate conveyed by force those leprous persons, who, being attacked by the *Juddam* did not give notice of their condition. But it seems that government has little care about these unfortunate persons, as they come every Friday to ask alms in the market-place: I might have seen many of these sufferers, but I thought it most prudent to avoid them. It is said that they endeavour to assuage their miseries as much as possible, and, shut up as they are, yet

continue their amours. The leprosy is not uncommon at *Bombay*, among the lower class of Indians: but it is not malignant, for I heard say, that they permitted, without difficulty, those who were diseased to labour with those who were in health; they said too, that this leprosy, as well as the itch, was occasioned by bad nourishment, and especially by corrupted fish.

The following observations are by Mr. FORSKAL:—“Lepers are found at *Cairo*; however, they are not common. The Arabs name *Behaq* that species of leprosy in which certain little spots discover themselves hither and thither on the body; and this, without doubt, is that named *Bohak*, Lev. xiii. It is thought not to be contagious; in-somuch, that it is said the patient may be slept with without hazard. When the leprosy spreads all over the body, the Arabs call it *Barras*. It is easily distinguished in the East, where black hair is universal; because this disease renders the hair white. They say that this leprosy may be cured, when, in the midst of white spots, the hairs continue black; but that it is incurable if they become white. A man of *Aleppo*, who had been at *Damascus*, said, that there were in that city two districts filled with lepers, one of Mahometans, the other of Christians: and that each was supported by the alms of those of the same religion. These fellows in imprisonment form alliances among themselves; and when a child is born those of their faith who reside in the city, take it from the mother, and give it a healthy nurse. If after three months, this child has not the leprosy, it is brought up in the city; if he is infected, they return him to his parents: the healthy nurse fears no infection.

“May 15, 1763. I saw at *Mocha* a Jew, attacked by the leprosy *Bohak*. The spots were of unequal sizes; they did not appear shining, were very little raised above the skin, and did not change the colour of the hairs. The spots were of a dull white, verging toward red. The patient whom I saw had the rest of his flesh blacker than is usual among the inhabitants of this country; but his spots were not so white as the skin of Europeans who are not sun-burnt. The spots of this leper did not appear in his hand or around his navel; but on the neck and the face, not on any part of the head where the hairs were thick. They spread themselves by degrees; sometimes they last but two months, sometimes one or two years, and disappear of themselves. This disease is neither contagious nor hereditary, and occasions no inconveniencies. The Jews believe that it is produced by excessive joy; never by vexation or sorrow. [At *Bagdad* they say it is produced by drinking milk after having eaten fish.] We were afterwards

afterwards shewn an Indian who had the leprosy *Barras*, and I found that his spots were of a different colour from those of the *Bohak*. The skin of the Indian was much blacker, and nearly approaching to soot; but his spots were much whiter than those of the Jew. By holding by the side of these spots the hollow of my hand, I found the shade equal. This unhappy sufferer had the leprosy in his hands, and on the soles of his feet; and the blotches spread on all sides, rising even to the legs. In this subject, the hairs, naturally black, were become white in the spots, and were fallen in several places. In his youth he had had the leprosy on his breast and in his face; but as he was going in pilgrimage to Mecca, a *Scherif* had cured him, by spitting on the places which were infected. The hair of his head, his beard, and his breast, had retained their natural black colour." p. 121, &c.

The foregoing account is so particular, that the sacred writer may almost stand as a commentator on the modern traveller; for Moses prescribes the visitation of the person afflicted, and the symptoms of the affliction, with an accuracy perfectly correspondent to the remarks of the observant Dane. He notices the spots—the hair turned white—or not turned white—the spreading of the blotches, &c.

It merely remains, that we observe the difference of the Hebrew names for the different species of this disease.

Tjaroeth, a leprosy of a bad kind: Gr. λευχή, white. [Observe, that Hippocrates, lib. ii. *Prophet. ad fin.* mentions the *Leuce*, as "one of the most dangerous distempers, such as that called the *Phenician*"—and this disease was called some centuries ago, "the *Tyrian leprosy*."—We infer, that, as it depends more or less on food, Moses could not too strongly prohibit such kinds of food as might promote it, from a people who were about to inhabit the seat of it, Syria and Phenicia.]

The plague on the head or beard, verses 29, 30. may be considered as another kind of leprosy,—distinct from the milder kind, which Mr. *Forskal* tells us, "did not come on any part of the head where the hairs were thick:" our *scalled* head is probably analogous to this kind of leprosy, called *natak*.

Bohak, verse 39, is sufficiently explained above. As to the attention of the priests, and the legal ceremonies to be observed on these occasions, they seem to be a mixture of precaution and of piety.

Before we quit this extract from NIEBUHR, I wish to direct the reader's attention to the action of the *Scherif*, spitting on the places of the Indian where the leprosy appeared. May this serve to explain a passage where a leprosy is the sub-

ject, Num. xii. 14.? *Miriam* was struck with a leprosy of the malignant kind, *Tjaroeth*, verse 10. When Moses intercedes for her; the LORD replies, "If her father had but spit in her face, or on any part of the surface of her skin, with design to cure her of the leprosy *bohak*, that of the slightest kind, should she not have been secluded, kept in private, to see the effect of this remedy, seven days? Now if in that slighter state, she would have been so separated, let her at least be treated in an adequate manner, under this severer dispensation: shut her out from the camp seven days, that this malady may be well known, and so become a token to all the people." Is this the true bearing of the passage?

VERSES 47, &c.

THE LEPROSY IN CLOTHES.

This account is long, distinct, particular, but very obscure.—I shall first suppose, that the garments worn by leprous persons, receiving infection from their wearers, become thereby unclean; i. e. contagious. That this disorder may be communicated by such means, is evident from a history in NIEBUHR on this subject; which, at least, supposes that such communication was well known, and expected to take effect. "But a few years ago, a leprous person, in order to obtain a woman whom he loved, wore during several days an inner dress of fine linen, which he contrived should be sold to her, at a very low price. When he had received information by his spies that she was infected, he acquainted the magistrates, and she was shut up," in the hospital where lepers, (and himself among them) were secluded. This kind of infection gradually corrodes even the texture of garments; and is much dreaded in all countries subject to the plague, and by all persons exposed by attendance on purulent distempers.

There is a second sense which may be attributed to the passage; that of a natural disease in garments, a disease appertaining to themselves. This, I apprehend, is the true meaning of the writer; but I know no traveller who has mentioned the subject; neither does the sacred legislator confine his remarks to one kind of garment, but he supposes that as well linen as woollen may be subject to it. I have read of woollen garments undergoing putrefaction, and even taking fire in consequence, [Dr. WATSON'S *Chemical Essays*, vol. i. p. 189, note,] but not of such accidents happening also to cotton, or to linen. By way of conjecture I would ask whether destruction of garments by an insect might be here intended? for we read, James v. 2. your garments are moth-eaten; and Luke xii. 33. the moth corrupteth—where

where the idea of *corruption* by the moth deserves notice; and if admissible, would render the Mosaic account, and the precautions in consequence, clear and easy.

CHAPTER XIV. VERSE 34.

LEPROSY IN THE HOUSE.

THIS also is a subject on which we have little information: the description of it by Moses is precise, but answers to no modern accounts that I have perused. I shall therefore add on this, and the former subject, merely to shew the power of contagion, and to justify the rigid precautions of the divine law, an extract from "Dr. MEAD on the Plague;" but I think I recollect to have read, that, during the great plague in London, the walls of the smaller rooms, where the sick lay, were discoloured, green, red, &c. by pestilential effluvia. We know too, that salt-petre incrustations are common in our walls, whether of stone or brick; and that no plaster can repel them: but I doubt whether this be correctly the disease referred to. The dry rot in timber is equally fatal and equally uncontrollable; but I do not know that it produces red, or green, &c. discolourations.

Dr. MEAD tells us, p. 9. 8vo. edit. On the Plague of London, 1665, "That the contagion came by COTTON imported from Turkey;" that the houses themselves were infected. He conjectures that the *matter of contagion* may be of the nature of a salt. "I am particularly careful to destroy the cloaths of the sick, [by burning them,] because they harbour the very quintessence of contagion." A very ingenious author, [Boccace, *Decam. Gior. 1.*] in his admirable description of the plague at Florence, 1348, relates what himself saw:—"That two hogs finding in the streets the rags which had been thrown out from off a poor man dead of the disease, after snuffling upon them, and tearing them with their feet, fell into convulsions, and died in less than an hour." p. 24. Dr. RUSSELL mentions infection by clothes after a year.

I do not know that the leprosy had any relation to the plague—though it might have more than is thought for; but I insert these remarks to shew the absolute necessity of *burning* and totally destroying the seeds of infection, whether in clothes or houses, which the Mosaic appointment so strongly enjoins. What shall we think of the behaviour of David in after-ages, who risked his person by visiting the streets of Jerusalem, during a similar contagion?

CHAPTER XVII. VERSE 7.

They shall not sacrifice to DEVILS.

THE original word, rendered *devils*, *Sair*, or *Sairim*, has several significations. It denotes creatures which are thickly *clad with hair*; (or, whose hair stands erect,) such as goats. That the Egyptians adored these animals appears from Herodotus, *lib. ii. cap. 46.*; Diod. Sic. *lib. i.*; Strabo, *lib. xvii.*; and even the name *Mendes*, given to one of their capital cities, signifies equally a goat, and the goat-formed deity, *Pan*. Pindar alludes to excesses of this kind, even by women, as quoted by Strabo, and by Elian. *Nat. Hist. lib. vii. cap. 19.* Herodotus says the same. Whether *goats* were the only *Sairim*, hairy gods, of Scripture may be doubted. The hairy monkey *Cynocephalus*, was probably one of these deities; as he certainly was worshipped in Egypt: and, if there were any proof that the hairy *Ouran-outang* was known so far north in Africa, perhaps we might include him also among these divinities. Beside this, the heathen represented as partially brutal, *Jupiter Ammon*, with the head of a ram; *Jupiter the Theban*, in the form of a ram; *Anubis*, as a kid; *Diana*, as a cat, &c. it is probable that these are among the *Sairim* of our text. How far our translation is correct in rendering this word *devils*, we do not determine; but it should appear, that, in order to dissuade their converts, &c. from the worship of similar idols, the Christian fathers described them, and their nature, in terms the most beastly, terrific, and horrible. [The ox *Apis* of Egypt, and *Nanda*, the bull of Hindoostan, may be added to the number of hairy deities.]

CHAPTER XIX. VERSE 19.

THOU shalt not let thy cattle gender with a diverse kind; nor sow thy field with mingled seed; nor wear a garment mingled of linen and woollen. The design of this law being to prevent mixtures, one sentence may contribute to explain another. The first prohibits *animal mules*; the offspring of the ass and mare, or horse and ass, &c. The second, I understand also, as prohibiting *vegetable mules*; i. e. that when, for instance, in a field or garden, two plants of different kinds growing near together, the *farina* of one is conveyed by the wind, or by insects, &c., and impregnates the other, the seed so impregnated, being a mixture, shall not be sown; in order that it may not become a prolific generation, but may terminate in the first instance. This may also include *grafts* of unlike fruits; for instance, of an orange on an apple, or &c.; but, I suppose, one

one kind of apple grafted on another, or plumb upon plumb is not prohibited. To this *intimate* mixture of subjects *unlike*, may be referred also the *linsey woolsey* garment.

It will be perceived, that I understand our translation to have hit the true sense of the text; but others render it as if it forbade sowing the same land with two sorts of seeds; as of clover and wheat, or vines and cabbages, or &c. at the same time, though the crops come to maturity at different periods of the year. The Jews divided their seeds into three principal classes: 1. Seeds of revenue, *Corn*; wheat, barley, rye, &c. 2. *Pulse*; pease, beans, lentils, &c. 3. *Pot-herbs*; onions, leeks, carrots, turnips, &c. They forbade that these should be sowed confusedly, mingled, or so near together that one could draw away the nourishment from another. The distance necessary between species, in a field, was ten yards; in a garden, ten feet. They might not place a row of cucumbers by the side of a row of melons, alternately; but must put two rows of cucumbers together, and must draw a trench between the rows of cucumbers and those of melons.

I shall add the custom of Arabia at this day. "I enquired respecting the mixture of seeds from a Jew of *Maskat*, who had an estate in land. He answered me, he himself, like all the inhabitants of *Oman*, made no scruple of sowing in the same field two seeds mingled; when they thought it might be profitable: but that it was prohibited to graft a tree, or, as he explained himself, to plant a shoot of white grapes on a stem of black grapes; or to wear a dress whose warp was of hair, [or wool,] and its woof, was of cotton; and the same of a stuff, part cotton, part silk." For this information we are indebted to NIEBUHR. In many English counties seeds of different species are sown at the same time on the same ground; but they are such as come to maturity at different periods, so that the first crop may be gathered without injury to the second. In the case of *biennial plants* this is common:—so *carraways* sown at the same time with *wheat* come up and are gathered in the *following year*. Several kinds of grasses are frequently sown together, on purpose to obtain crops of them, for years in succession, as clover with hay seed, &c.

AN
EXPOSITORY INDEX
TO THE BOOK OF
NUMBERS,
OF SUBJECTS RELATING TO NATURAL SCIENCE.

THE subject of the book of Numbers is among the most perplexing which occur in sacred history; that is to say, the great multitude of which the Israelite caravan was composed; said to amount to 600,000; and, as usually understood, *BESIDES women and children*. This, according to the most moderate calculation, allowing as many women as men, 600,000, and three children to a family, would make the whole descendants from Jacob, 3,000,000 at least. To this must be further *added*, the servants, &c. which accompanied Jacob and his sons into Egypt; *i. e.* the

posterity of these servants. It is difficult to say what number should be allowed for these persons, and their families: Abraham had 318 servants, armed, trained to war; so that his household consisted of at least 1000 persons, men, women, and children. Had Isaac diminished this number? or had Jacob? I suppose not. If Simeon and Levi, with their servants, could destroy a city, Gen. xxxiv.; if Jacob could recover land from the Amorite, with his sword and with his bow, Gen. xlviii. 22.; if Ephraim could war against Gath, 1 Chron. vii. 20, 21.; these expeditions demonstrate

demonstrate that the Jewish patriarchs must have had numerous attendants; since not all their attendants could be soldiers. But, supposing that these were only the same number as the patriarchs, and had multiplied in Egypt like them, they would add 3,000,000 to the camp of Israel.

We are informed further, that Israel was accompanied out of Egypt by "the *mixt multitude*." Of how many persons was this *mixture* composed?

When we have added all these together, we shall find the total to be absolutely unreasonable, 6,000,000! Never yet did the earth behold so great a number of its inhabitants assembled in one company! How did they live in Egypt? how could that country sustain them? and, when fled, how could Pharaoh expect to subdue them? what line of march did they occupy? &c. &c.

We may further enquire into the possibility of expecting to feed this immense multitude: nor let this be esteemed frivolous; for whatever faith *Moses* might have in the divine protection, whatever miraculous interference he might expect, the *Israelites* at large were by no means so well satisfied as their leader; and—the *mixt multitude*—what dependence had they on divine support? Yet we ought not, I think, to suppose that these were led blindfold (Num. xvi. 14.) on apparent ruin and starvation; to say nothing of the flocks and herds of oxen, sheep, camels, &c. &c. Did the Hebrew nation, at any time, even in Canaan, contain a population of 6,000,000?

Major RENNELL has demonstrated that Babylon could not have been fully peopled, without exhausting a fertile country half as large as Britain. It is considered as absolutely impossible that the army of Xerxes, which amounted to one million of men should have been fed by the provinces through which it is reported to have passed. If these great numbers render such instances incredible, how can we suppose that the caravan of Israel could exceed them in a sextuple proportion? The fact is the numbers as they stand by fair inference are impossible: but, where is the error? and how shall we discover it?

Whoever requires miracles where no clear necessity for them can be proved to exist, whoever stretches the possibilities of nature to the utmost, in order to establish an hypothesis which includes a supposed necessity, transgresses those rules of just reasoning, and fair interpretation, the paramount controul of which is no less requisite in considering Israelitish histories, than in considering occurrences among other nations. Why then should we attribute an immense fertility to the children of Jacob while in Egypt? a fertility continued without intermission above 200 years; incapable of failing in a single instance; which bestows a length of life on individuals, without exception; makes no allowance for premature deaths, by the

sword, by pestilence, by accidents, &c. &c. to which all families, all nations ever have been, ever will be exposed.

When we find St. Paul observing, that "ALL were not Israel who were of Israel:" i. e. that beside the personal descendants of Jacob, many, not his descendants, were reckoned among his people, we are led to consider, whether the recorded numbers of the Israelitish camp, in the Old Testament, should be taken *inclusively* or *exclusively*; i. e. whether the descendants of the servants, &c. who went down into Egypt with Jacob, are not mustered as so many Israelites, capable of war. This, if admitted, diminishes greatly the miraculous fertility of the sons of Jacob while in Egypt, and renders much more credible the numbers attached to each tribe; so that we need not seek for the means whereby 70, or 75 persons, should, in about 215 years, become some hundreds of thousands; a multiplication utterly irreconcilable with any natural principles: but not so if we add to the 70 or 75 patriarchs, the increase fairly to be expected from domestics, &c. who accompanied them to Egypt.

We might further ask, whether it be impossible that the true import of the passage understood to say, "600,000 men, *besides* women and children," is not rather "600,000 persons, women and children included." I do not urge this argument by any consideration of grammatical construction, though, perhaps, something might be said upon it, not without plausibility.

Observe further on the numbers recorded in this book, that they all end with a cypher. Is it not extraordinary that no one ends with a 4 or a 5 or any other number? Not only every sum total ends with a cypher; but every tribe ends with a cypher also. To judge of this, calculate the chances that any twelve enrolments should all end with even numbers, or cyphers.

We proceed now to consider this branch of argument; and, rather chusing to point out errors in other ancient books, even when copyists only are answerable for them, we shall consider some instances among them where their numbers are closed by cyphers.

Sir WILLIAM JONES has instituted a laborious calculation of *Hindoo* chronology, to shew that so long lives could not possibly follow in succession, as the *Puranas* affirm. I took the trouble of reducing the numbers to figures, and observing that they ended with cyphers, I cut off the cyphers from them; the result was, a coincidence with the numbers Sir WILLIAM had inferred by reasoning. An instance or two may be agreeable;—p. 126. *Asiatic Researches, Calcutta Edit.*—"VAIVASWATA, [*i. e.* Noah,] reigned 3, 892,000 years ago."—Cut off the three cyphers, it makes 3,892: which, that it is nearly the true number is evident

evident, from a remark, p. 132. "The hypothesis that government was first established, laws enacted, and agriculture encouraged in *India*, by RAMA, about 3,800 years ago, agrees with the received account of *Noah's* death, and the previous settlement of his immediate descendants:"—3,892 is sufficiently near to 3,800. P. 134. "The reigns of these princes are supposed to have lasted 864,000 years; a supposition evidently against nature; the uniform course of which allows only a period of 870:"—cut off the cyphers—864 is sufficiently near to 870. There are other instances beside these.

The same principle is applied to *Herodotus*, vide FRAGMENT, No. 322. p. 33: and the same must be done with *Diodorus Siculus*, who tells us, lib. i.—"The remainder of 15,000 years has been filled by Egyptian kings, in number 470."—cap. 3. sec. 2.;—but in cap. 4. "The priests say their books mention 47 tombs of kings."—How is this? each king is supposed to have had his tomb; 47 tombs to 470 kings! Correct this by cutting off the cypher from the larger number. [The 15,000 years requires a similar diminution to 1,500.] Compare lib. ii. cap. 21. "The Chaldeans say, they began their celestial observations 473,000 years before Alexander,"—with the Egyptian account, lib. i. sect. 2. cap. 21. "Egypt was governed by native kings 4,700 years." This being the same space of time referred to by both nations, the lesser number must correct the greater, by cutting off two cyphers, which will make them agree; Chaldea being more easterly, was settled earlier than Egypt.—4,730 is sufficiently near to 4,700.

Since then we find that the antient Hindoo books, the antient Chaldean books, the antient Egyptian books, all agree in the same mode of incorrectness, and are apparently restored to correctness, by removing the cyphers, need we wonder if a similar evil has, in one or two places, attended the Hebrew copies also? But to what could this be owing? Did the original writers use cyphers? or, did they use terms whose genuine signification was afterwards lost, or the notation of which became afterwards misunderstood? How should this happen in countries so remote from each other? There must be some common source of this error; for that it is a wilful mistake I cannot allow.

[N. B. If we consider a single cypher as cut off from the number of the Israelites, (600,000) to meet the first numeral figure, (the tribe of Gad, 4,565,) it would reduce the descendants of Jacob to 60,000 men; to which add women, children, servants, &c. it would, on the calculation adopted above, fix the number of the whole caravan at 600,000.]

We may have occasion hereafter to consider the modes of numeration among the orientals; at present, I shall subjoin a specimen of a manner which would certainly puzzle a European.

"The Arabians have a very singular idiom in their dates, and other large numbers, placing, generally, the units before the tens, the tens before the hundreds, and the hundreds before the thousands; though it is not uncommon, even in the same passage, to follow both methods: as, 'The chronologist says, that in the *Rabi' l'awel*, (May) of the year twelve and three hundred of the *Hejra*, there appeared a comet, sending forth rays and sparks of fire, and there followed it three bright flames; and it was at the fourth hour of the night, which was as light as day: and this happened in the six thousand and four hundred and sixteenth year of the world.' *Richardson, Arab. Gram.* p. 48.

This in figures would be 12
300

Total 312 Years. A.M. 6416.

If it be asked, whether this mode of placing units before tens, tens before hundreds, hundreds before thousands, is ever used in scripture? I would ask in return, whether it will explain satisfactorily the number of people smitten at *Bethshemesh*, 1 Sam. vi. 19. "the Lord smote among the people 50,070 men." But here the smaller number—70, is put before the larger—thousand; and the word *men* comes between them: the word *fifties* also is plural, or dual; and the word *thousand* is singular; therefore, does not agree with it. Suppose we place this literally—"The Lord smote seventy men, fifties, a thousand men." On the same principle as the Arabic notation, this would be 70

two fifties 100
a thousand 1000

Total 1170 Persons.

Whether this smaller number be most credible for the little town of *Bethshemesh*, the reader will judge; we can hardly think 50,070 persons had looked into the ark; and, if they had, why not say so at once?—why put the 70 before the thousand, with the word *men* between them?

If the same principles of enumeration were applied to the loss of the Assyrian army, *Isaiah xxxvii. 36.* it would greatly vary the numbers from those of our translation: "And an angel of the Lord went forth, and slew in the camp of the Assyrians, (literally) one hundred AND eighty AND five thousand, i. e. 5,180, [or, at most, 85, 100.]; which is usually understood 185,000. In 2. Kings xix. 35. the numbers stand, one hundred eighty AND five thousand; which, if we allow the proper force of the *and*, makes 5,180, [or 85,100.] Now, this number is much nearer to probability, to the supposable force of Assyrians encamped before any one town, to the course of a Samiel wind, and to the

remark

remark, when THEY AROSE IN THE MORNING they were ALL dead corpses; i. e. these 5,180 were entirely dead, beside a greater number injured: for, if they were all dead corpses, how could they rise in the morning? Vide FRAGMENT, No. iv.

[If we might rely on the fact recorded by Herodotus, that the ancient mode of calculation was by the (Chinese?) *Abacus*, or *arithmetical addition table*, possibly it might discover the source of these errors: the following may give an idea of such a statement: the enumeration we have already given would stand more regularly thus:

Units	—	—	—	—	—	...
Tens	—	—	—	—	—	7
Fifties two	—	—	—	—	—	1
Hundred	—	—	—	—	—	...
Thousands	—	—	—	—	—	1

Total, in European notation 1,170

We may read this—*Seventy, AND one hundred, AND one thousand.*

Also, the number of Assyrians slain might stand:

Units	—	—	...	or	...
Tens	—	—	8	...	...
Hundreds	—	1	...	1	...
Thousands	—	5	...	5	...
Ten Thousands	...	...	8	...	...

Total, 5,180 85,100

We may read this—*Eighty, AND one hundred, AND five thousand; or, One hundred, AND eighty-five thousand:* but the first seems the most regular.

As writing, (and numeration also,) has certainly undergone variations in the manner of being read; having been sometimes read from left to right, at other times from right to left, it is evident that a small degree of inattention in copying, to adjust passages where numbers are recorded, would have the effect of producing cyphers, where they were not originally intended. The reader will readily perceive, if he has an opportunity of inspecting the figure of an *Abacus*, or *numeration tablet*, the influence this change of mode might have.

I shall only further refer at present to the article *ABACUS* in *Chambers's Dictionary*, where we read, "The *Abacus*, for facilitating the operation of arithmetic, is an instrument almost as ancient and extensive as the art itself: if it be later than the methods of computing by the fingers, and by *lapilli*, or stones, (which obtained among the Egyptians,) it is, at least, much prior to the use of numerical letters or figures, wrought with the pen." Herod. lib. i. We find it in use among the Greeks, Romans, Chinese, &c."]

I would also hint at a mode of enumeration, Ezek. xiv. 12. which appears to us very strange:

"And the shekel twenty *gerah*: twenty shekels; five and twenties shekels; ten and five shekel, the mina shall be to you." This is usually understood to mean "sixty shekels shall make a mina:"—i. e. the addition of 20, 25, 15—makes 60. What a round-about way of counting 60 is this? I doubt whether we understand it in Europe; it seems to be an oriental mode of calculation, not yet explained to us. Mr. Harmer has an observation on it, p. 512, vol. ii.; but still it appears obscure.

What I mean to infer is, that we are not to blame the sacred books for our own *non-understandings*: if we cannot reckon their numbers properly, what follows? not that they are erroneous, but that we are ignorant: and if we be ignorant, the thought should not only stimulate us into further researches, but should render us grateful to any, who, by communication of their remarks, may help to lead us to more correct principles.

It is very true, that these numbers are not articles of faith, nor can they justly pretend to equal importance: but they are of some importance; they have given occasion to enemies to blaspheme; they have furnished arguments to free-thinkers and infidels, of which it is desirable honestly and fairly to deprive them; they have embarrassed the humble but hearty friends to revelation: and is it not then to be wished that they were entirely corrected? not by fancying errors in the sacred books, but by superior information and knowledge, derived from those very countries where the Scriptures were originally written: especially as to this day they have retained some of those peculiarities which we, in our western situation, find perplexing; and others might in time be traced and unravelled by persevering diligence.

We have in the writings of Moses three enumerations of the Jewish people; the first at the Exodus:

Exod. chap. xxii. 37 600,000
One year afterwards 603,550
At entering of Canaan 601,730
To which is added the number of the Levites, 22,000.

The Numbers of each Tribe.

REUBEN	46,500
SIMEON	59,300
LEVI	22,300
JUDAH	74,600
ISSACHAR	54,400
ZEBULON	57,400
GAD	54,650
ASHER	41,500
MANASSEH	32,200
EPHRAIM	40,500
DAN	62,700
NAPHTHALI	53,400

625,850

K

"The

"The army of Israel was divided into three principal distinctions: the first was the center, in which stood the tabernacle; the second, composed of priests and Levites, surrounded the first; the third contained the rest of the people of Israel, was at least a quarter of a league distant from the tabernacle: for it appears by Joshua iii. 4. that the nearest approach to the ark permitted to the people was 2,000 cubits. The respect due to the Divine Majesty, the numerous army of the Israelites, composed of 600,000 soldiers, with their families, (which makes 3,000,000 of persons,) necessarily required a great extent of space.

"Four divisions faced the cardinal points, with their ensigns, making the main body of the army. *Judah* was placed east, and with him *Issachar* and *Zebulun*; *Reuben* was to the south, and with him *Simeon* and *Gad*; *Ephraim* was west, and with him *Manasseh* and *Benjamin*; *Dan* was north, and with him *Asher* and *Naphtali*."

The Talmudists pretend that each tribe had its banner, on which was delineated the sign of the tribe: that they had banners indeed is evident; but for these delineations we have merely Talmudical authority; and shall therefore only report them.

JUDAH	<i>a Lion</i>	Gen. xlix. 9.
ISSACHAR	<i>an Ass</i>	14
ZEBULON	<i>a Ship</i>	13
REUBEN	<i>a River, or a Man</i>	4
SIMEON	<i>a Sword</i>	Gen. i. 5
GAD	<i>a Lion</i>	Deut. xxxiii. 21
EPHRAIM	<i>a Unicorn</i>	17
MANASSEH	<i>a Bull</i>	
BENJAMIN	<i>a Wolf</i>	Gen. xlix. 27
DAN	<i>a Serpent, or Eagle</i>	17
ASHER	<i>a Sheaf of Corn</i>	20

The numbers of these divisions were:

Judah, and his corps,	186,400	verse 9.
Reuben, and his corps,	151,450	— 16.
Ephraim, and his corps,	108,100	— 24.
Dan, and his corps,	157,600	— 31.

Total . . 603,550 verse 32.

The idea of three camps, an *interior*, a *middle*, and an *exterior*, is used to explain certain orders respecting degrees of uncleanness; as chap. v. 2, 3, "Command the children of Israel that they put out of the camp, [*i. e.* from *all the three camps*,] every leper; and [from the *two interior camps*] every one who hath an issue; and [from the *interior camp*] whosoever is defiled by the dead:—that they defile not their camps [plural] in the midst whereof I dwell."

The camp also had *gates*; as appears from Ex. xxxii. 27. "Put every man his sword by his side, and go in an out from *gate* to *gate* through-

out the camp." Were these *gates* fortified, or guarded in any manner? Was the whole camp surrounded in any manner, by intrenchments, or a *stoccado*? It is likely that each gate had a guard.

CHAPTER II.

OF THE SPACE OCCUPIED BY THE CAMP OF ISRAEL.

IF we examine and compare the camp of Israel with those of our greatest armies, which now-a-days consist of 100,000, or 150,000 men, we must needs allow it a great extent. The Jews say, a circuit of 12 miles; which is three miles in length to each front.

The very space requisite for so many men to stand in is considerable, even in close order; and allowing each man only one cubit square, which is too little: for instance, the tribe of Judah, in close order, would require,

A depth of 300 cubits.

A breadth of 250

75,000 cubits square.

This is considerably too small for the men only; (the Romans allowed three feet to each man;) but we must add, to judge properly, the women, the tents, the cattle, the baggage, and other indispensable accommodations for the people and their families.

By way of forming some conception, place in the center of all the TABERNACLE, in length 100 cubits, in breadth 50; separated from the Levites by an interval of 50 cubits; then suppose the Levites to occupy a space of,

The Gershonites . . . 7,500 cubits.

The Kohathites . . . 8,600

The Merarites . . . 6,200

Beside the tents of Moses, Aaron, &c. and the space allotted for general assemblies of the people on public occasions. Between the camp of Israel and the Levites, suppose an interval of 2000 cubits; and then allow the necessary depth for each tribe: the result will be, that the camp of Israel contained 12 square miles, and something over, at the lowest computation, [which is much too low.]

The above calculations are extracted from SCHEUZER, who supposed the camp of Israel to have been *square*; but, it is not unlikely that it might be *circular*, since such is the form adopted among the Arabs. This would enable the general to direct the streets of the camp at his pleasure;

sure; and he might easily enable every one to have a view of the tabernacle, and the signals made there; which, if the camp were square, and the streets crossed each other, was impossible.

There are several instances in which the people seem to have beheld the center of the camp from every part of it; and the various manifestations of the cloud of the Lord, &c. seem best adapted to a camp whose streets tended all to the same central point.

CHAPTER V. VERSE 17, &c.

THE WATER OF JEALOUSY.

THE water of jealousy drunk by an Israelitish woman, suspected of infidelity to her husband, but denying that crime, has been a subject of great difficulty; more especially as we do not read of this rite ever having been put in practice in any succeeding age. Was this rite now *first* instituted? Was it now first instituted in reference to jealousy? What was its import?

I presume, it contained the essence of an oath, varied for the purpose of peculiar solemnity; so that a woman would naturally hesitate to take such an oath, understood to be an appeal to heaven of the most solemn kind; understood also, to be accompanied, in case of perjury, by most painful and fatal effects. The Jews say, that the woman was led in a disgraceful manner to the place appointed for judgment, and was otherwise perplexed, shamed, and fatigued; but of this Scripture says nothing: neither indeed is it credible, as the hardship of the case seems to be quite enough, without addition, on a woman who might be perfectly innocent.

As something of the same nature still obtains in Africa, I shall give an instance or two from Mr. PARKE.

"At Baniserile, one of our Slatees, (slave merchants,) returning to his native town, as soon as he had seated himself on a mat, by the threshold of his door, a young woman, (his intended bride,) brought a little water in a calabash, and kneeling down before him, desired him to wash his hands; when he had done this, the girl, with a tear of joy sparkling in her eyes, *drank the water: this being considered as the greatest proof she could possibly give him of her fidelity and attachment.*" M. PARKE, 347.

I understand the action of the woman to be a kind of oath; *q. d.* "May this water prove poison to me if I have been unfaithful to my absent husband." This the innocent might drink "with a tear of joy," while a guilty woman would probably have avoided such a trial with the utmost solicitude. Another instance is still more applicable.

"At Koolkorro, my landlord brought out his writing-board, or *walha*, that I might write him a *saphie*, to protect him from wicked men. I wrote the board full, from top to bottom, on both sides; and my landlord, to be certain of having the whole force of the charm, *washed the writing from the board into a calabash, with a little water, and having said a few prayers over it, drank this powerful draught*; after which, lest a single word should escape, he licked the board until it was quite dry." MUNGO PARK, 236.

Here we find the sentiments expressed in writing are supposed to be communicated to water; and that water, being drank, is supposed to communicate the effect of those sentiments to him who drank it. This drinking then is a symbolical action; in like manner, I suppose, when the priest of Israel wrote the curses in a *sepher* [letter,] and washed those curses into the water that was to be drank, the water was understood to be impregnated, as it were, to be tinged with the curse, the acrimony of which it received; so that now it was metaphorically *bitter*, containing the curse in it. The drinking of this curse, though conditionally effective or non-effective, could not but have a great effect on the woman's mind; and an answerable effect on the husband's jealousy; which it was designed to cure and to dissipate.

Query, As the girl drank the water from her husband just returned home after a long absence, was this the case with the Israelitish husband, who had, if he pleased, this mode of swearing his wife to her fidelity *during his absence*? On what other occasion is it equally likely his jealousy would burst forth to this excess?

N. B. If a husband loved his wife too well to part with her, on suspicion; if a woman loved her husband so well as to risque this exposure, to satisfy him, then this rite might take place; but if either did not chuse to hazard this experiment, the way of divorce was open, was much easier, much less hazardous, more private, more honourable, and perhaps more satisfactory. This may account why we have no recorded instance of the use of the water of jealousy.

That ordeals of other kinds were practised among the Gentiles is well known; they were used to detect perjury. Vide *Vit. Apollon.* lib. i. cap. 6.; lib. iii. cap. 15. Pausanias mentions others, lib. vii. and the custom is still maintained among the *Hindoos*.

CHAPTER XI. VERSES 1, 2, 3.

FIRE OF THE LORD.

THE question on this passage is, whether this fire was *lightning*, or the *Samiel*, a fiery wind? The

The expression, "it consumed in the *uttermost part* of the camp," is capable of two senses; it consumed the whole of one extreme of the camp; or, it consumed in different places, but they were all at the extremity of the camp. If one part of the camp was the scene of this fire, then, no doubt, it was a burning wind, which passed over that edge of the camp, but did not enter wholly into, or cross over, the center of it, or where the people were thickest. Otherwise, it might be lighting. SCHEUZER prefers the former sense; observing, that *Thevenot* mentions the death of 20,000 men, who perished in one night by one of these burning winds.

VERSE 5.

We remember the fish which we did eat in Egypt, gratis; the CUCUMBERS, the MELONS, the LEEKS, the ONIONS, the GARLIC.

Interpreters are pretty well agreed on the import of the Hebrew word rendered *cucumbers*; and that the following denotes *melons*. It is most probable that these names include all of their kinds. These vegetables are still esteemed delicacies in Egypt, and still form a great part of the food of the lower class of people, especially during the hot months. In fact, the people are so fond of them as to bring various disorders on themselves, by eating them too plentifully.

Among the plants of Egypt which the Israelites regretted, is one which they call *Hatzin*: whether this was the *leek* may be doubted. Some think it was the *lotus*, which is a water-plant, a kind of water-lilly; which, says Homer, *Iliad* xxii. is "the first of plants which grow for the pleasure of the gods." Alpinus, *Plant. Egypt.* p. 103. says, this is the white *Nenuphar*—(the *Nymphaea*): "The Egyptians during the heats of summer eat the whole stalk, raw, with the upper parts; that they are watery, proper to moisten and refresh, and that they are called *Raz-el-nil*."

The ONION and GARLIC: These two plants were certainly highly esteemed in Egypt, and not without reason, that country being admirably well adapted to their culture. Pliny reports, *lib. xix. cap. 6*. "that onions and garlick were reckoned among the deities of Egypt, and that they even swore by them." And Juvenal, *Sat. xv.* says they were gods that grew in every garden:

*Quis nescit, Volusi Bithynice, qualis demens
Ægyptus portenta colat—
Porrum & Cæpe nefas violare & frangere morsu.
O sanctas Gentes, quibus hæc nascuntur in hortis
Numina!*

It should appear, however, that both Juvenal and Pliny have erred by supposing that the people were prohibited from using these plants: they were certainly forbidden as food to the priests;

but it is probable that the very idea of sanctity connected with them, arose from their having been originally a source of supply furnished by the hand of nature, without cultivation, to the inhabitants of this country, then covered with marshes, and other collections of water.

From the nature of these recollections, we perceive that the people longed for moistening, cooling diet; for vegetables calculated to correct the heats of the atmosphere: these are greater indulgencies beneath a sultry sky than the inhabitants of Britain can conceive.

VERSES 6—9.

MANNA.

For descriptions of eastern *Manna*, vide on Exod. xvi. 4, &c. As to the various modes of treating this manna, the making it into cakes, &c. nothing need be said. It should seem that it was treated pretty much as flour of wheat might be.

QUAILS.

For thoughts on the *Quails*, vide on Exod. xvi.

CHAPTER XII. VERSE 10.

THE LEPROSY OF MIRIAM.

THIS appears to have been of the malignant kind. For some thoughts on the subject, vide on Lev. chap. xiii.

CHAPTER XIII. VERSE 24.

THE GRAPES OF ESHCOL.

SCRIPTURE says, that the spies sent to inspect the land of Canaan, found a bunch of grapes so large that they brought it, as it were in triumph, hanging on a pole, between two bearers.

It is certain, that we must not judge of the eastern vines by our own; and that the grapes of Judea are at this day of great size: but the language of Scripture and of nature does not satisfy Jewish Rabbins; they insist, that this bunch of grapes was so large, and so heavy, that it required eight men to carry it; of which each sustained the weight of 360 lbs. *Wagenseil* cites also the Talmudists as saying, "Then, whoever could procure one of the grapes, was obliged to carry it away in a cart, or in a boat; and, after having placed it in a corner of his house, he might tap it, and draw out wine for family consumption, as out of a cask; the wood which the stalk furnished he might use to dress his victuals. There was not a single grape but yielded xxx hogsheads of wine."

What

What can these exaggerations mean? O commentators on Scripture, is this illustration, *mysticism*? or is it degrading and disgusting falsehood?

It is worth while to note such *extravaganzas*, because, we may securely infer, that where such perversions are patronized, the true sense and import of Scripture is not likely to be maintained, even in other passages.

We remember to have heard the captain of a merchant vessel relate that when at Malaga in Spain, two natives brought down from the mountains a very large bunch of grapes slung on a pole, between two bearers, and *load enough for them both*. They offered it for the value of a shilling sterling.

CHAPTER XVI. VERSES 31, &c.

THE PUNISHMENT OF KORAH BY AN EARTHQUAKE.

THE history of the punishment of Korah is among the most striking instances of the divine power, exerted to vindicate his appointments, and to destroy profligate offenders. Let the earth swallow men and their dwellings, when it opens its abysses: there is nothing in that beyond the powers of nature. When the earth trembles, those countries which are the seat of this disturbance must crumble into dust by the shock. Sicily and Italy furnish innumerable instances in proof of these assertions; yet, even in these instances, though not miraculous, it is the divine power that produces such commotions. All the works of nature are works of God. But here, while the earth is composed and tranquil, the man of God foretells the time, the place, the persons concerned, and the manner in which this prodigy should happen—and this, not in Sicily, not in Italy, not in a country undermined by subterranean fires; but in the sandy desert of Arabia, where rocks probably form the general under *strata*, and sand the upper; where earthquakes are little known, except by report; and where little expectation of this threat's fulfilment could arise in the minds of the hearers, from general appearances, or from supposable natural causes. Yet here, at the time appointed, Earth opens her mouth, and swallows down into her profound abysses the whole company of rebels; leaving no trace of them remaining, but by the void where they had been.

As to those who were slain by fire from the Lord, the probability is, that it was lightning; but nothing forbids its being an exhalation of a different kind; perhaps from the earth itself.

It is good to remark here, in passing, that the greater part of the miracles wrought to establish the Jewish religion were of a terrific nature, and

often involved the ruin of a multitude of transgressors: witness this destruction of Korah and his accomplices. On the contrary, the miracles wrought in establishing the truth of the gospel were salutary and benevolent, as well to the enemies, as to the friends of religion. The cursing of the barren fig-tree we have elsewhere proved to be no just exception; and the loss of the swine, which were drowned in the sea, is rather a proof of the power of demons, when unrestrained, than of the condemnatory tendency of the behaviour or conduct of Jesus.

CHAPTER XVIII. VERSES 7, 8.

AARON'S ROD.

IT has been the custom in all ages for elderly men, and for those in authority, to carry, as a mark of dignity, a rod or cane, or walking-staff; which at length became the *scepter* peculiar to princes. *Minos*, king of Crete, is represented in *Hesiod*, as "bearing the scepter of Jupiter;" and *Homer*, *Iliad* i. v. 14. says, the priest, *Chryses*, "had a scepter of gold." The priests, among the Greeks and Romans, had their *recurved rods*; and bishops, in later ages, have their *croziers*: all these are ensigns of dignity and office.

The rod of Aaron should seem to have been of the almond-tree: the fathers thought it was of some other kind of wood; but there is no need to augment a miracle which is sufficient in itself.

It is probable that the ordinary rods of Aaron, and of the other chiefs, were employed on this occasion. No doubt but this rod had been, during some years, dry and sapless; the circumstance, therefore, of its restoration to renewed vigour and life is certainly wonderful; which wonder is not diminished by reflecting on the short space of time in which it was restored to sap to verdure and fertility.

The Jews, to commemorate this miracle, have struck the blossoming rod on several of their coins.

CHAPTER XIX. VERSE 24.

THE RED HEIFER.

THIS heifer was to be not only *reddish*, but completely red; and *Maimonides* says, "that if two white hairs were found too close together, the creature was considered as unfit for the service." *Plutarch*, (*in Iside*) speaking of the precision of the Egyptians on a like subject, says, "They sacrifice *red bullocks*, and they select them with such scrupulous exactitude, that if the animal has a single hair black, or white, it is rejected as profane." The Israelites and Egyptians, then, were equally exact as to the colour of the animal; but they

they differed as to sex, one choosing a male, the other a female.

CHAPTER XXI.

THE SERPENT OF BRASS.

NEHASHIM *Seraphim*, "fiery serpents;" so named, either from their colours, flaming and resplendent, resembling red copper and fire; or, rather from the effect of their bites, which produced in the persons bitten a sensation of fiery heat and anguish.

The serpent named *Dipsas* has usually been selected, as answering to the nature of these fiery serpents. This creature possesses an active, penetrating venom.

As to the mode of cure of those bitten by these serpents, it is plainly superior to what nature could have produced; and therefore, while we quit it as naturalists, we refer to the adoption of it as a type, by our Lord, John iii. 14.

Dr. SHAW remarks, p. 388, "As we were obliged to travel in the night, several fossils, plants, and animals, besides other curiosities, must undoubtedly have escaped my notice. Yet I should not omit observing, that we were now and then offended with several little swarms of LOCUSTS, and HORNETS: both of them of an unusual size, though of the ordinary colours. VIPERS, ESPECIALLY IN THE WILDERNESS OF SIN, were very dangerous and troublesome; not only our camels, but the Arabs who attended them, running every moment the risque of being bitten." The Dr. having given these reptiles only the general name of *viper*, we cannot, from his account, identify the species. He again alludes to this desert as "affording a great plenty of the serpentine kinds." p. 429.

CHAPTER XIII. VERSE 28, &c.

BALAAAM'S ASS.

WE have already observed that there are in the East more kinds of asses than one, and we find those of the most costly, the most favourite race, are called *Atunoth*, and are set by themselves, as of high estimation: this word being feminine, it has been usual to consider these *Atunoth* as *she-asses*; but that they were a breed, not a sex, is, I think evident.

That Balaam was a man of consequence appears among other things, from his riding on one of these *Atunoth*; and I apprehend this is the kind still valued in the East. Dr. RUSSELL speaks thus of them, p. 173: "The common breed of asses is larger than that usually seen in Britain; and another, still larger, is preserved for the sad-

dle; for the ordinary people, and many of the middle class, commonly ride asses. Asses are often preferred to horses by the Sheiks, or religious men; and though most of the opulent merchants keep horses, they are not ashamed, especially when old, to appear mounted on asses. Those intended for the saddle, of the best sort, bear a high price; they are tall, delicately limbed, go swiftly in an easy pace or gallop, and are very sure-footed. They are fed and dressed with the same care as horses. The bridle is ornamented with fringe and cowries; and the saddle, which is broad and easy, is covered with a fine carpet." The reader will perceive from this description that these beasts do not come into the possession of the lower class of people. Compare the article on the WILD ASS, among the plates, Job. xxxix. 5.

As to the *speaking* of this ass, that is clearly out of the common course of nature.

CHAPTER XXIII. VERSE 21.

GOD hath brought him out of Egypt; he hath, as it were, the strength of an UNICORN. For this Unicorn, or *Rheem*, vide the plate and article in illustration of it, Job xxxix. 9.

CHAPTER XXIV.

LIGN ALOES.

AS trees of LIGN ALOES which JEHOVAH hath planted: As CEDAR-TREES beside the waters.

What trees are particularly intended by the Hebrew word, *Ahalim*, is not certain: the Persian translator renders, *Sandal-wood*; and the same was the opinion of a certain Jew in Arabia who was consulted by NIEBUHR.

But why are they described as trees which JEHOVAH had planted? I guess, that it refers to some traditional notion of the garden of Eden, which Jehovah planted; and, if that garden were in the east of Asia, then it is probable the tree meant here is an eastern tree; so that perhaps the *Sandal* tree is as likely as any. Moreover, as its wood is fragrant, it is therefore the fitter companion to the cedar. This is not meant to represent the translation *Lign Aloes* as improbable; very strong things have been said on this tree; and for further authorities, vide Psalm xlv. 9. where aloes are mentioned, but by a feminine word, *Ahaloth*; and the same, Prov. vii. 17. and Cant. iv. 14. where the *lxx* translate *aloes*.

The CEDAR-TREE is too well known among us to need particular description; there are several kinds; the cedar of Lebanon is the most stately. We have several specimens in the gardens of the curious in England.

AN
EXPOSITORY INDEX

TO THE BOOK OF

DEUTERONOMY,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER III. VERSE 11.

THE BEDSTEAD of Og, king of Bashan, was of iron, nine cubits long, four cubits wide. This bedstead must not be assimilated to our English bedsteads; but was of the nature of a *duan*, or broad settle, or sofa, so that the actual dimensions of its owner are not deducible, correctly, from those of this piece of furniture. The measures specified are about 15 feet long, by 6½ feet wide.

The phrase, *according to the cubit of a MAN*, ought not to pass without remark; because we have seen reason elsewhere to suppose, that where the word *man*, (AISH, אִישׁ,) is put absolutely, it signifies a *chief, sovereign, or prince*; and this passage seems to prove it, *q.* according to the authentic, standard, royal cubit; the cubit established by the *sovereign*, to whom appertains the right of regulating public measures, &c. This idea relieves us at once from a variety of embarrassments which have been felt by commentators.

CHAPTER IV. VERSES 16—19.

THE various idolatries mentioned in this passage were practised by one nation or another, round about the Israelites. It would lead us too far to notice each nation and idol separately; but it is worth our while, as naturalists, to observe the order and classification of this passage. I conceive that this was the system of the author: 1. Man, 2. Quadrupeds, 3. Birds, 4. Reptiles, 5. Fishes. As for the worship of the sun, moon, and starry heavens, it appears to have been among the most ancient delusions of mankind.

CHAPTER VIII. VERSE 4.

THY RAIMENT waxed not old upon thee, neither did thy FOOT swell—that is to say, Providence has prevented thee from appearing in tattered garments; enabling thee constantly to make a decent appearance, by procuring proper dresses; and thy foot has not been injured by contusions, occasioned by striking against the sand and gravel; but thou hast always had a supply of protecting coverings to thy feet.

The Rabbins, however, understand this passage as denoting a phenomenon of the most miraculous nature; they say, angels were taylorers to this people, and made their clothes of silk, and tissue of divers colours; and this they prove from Ezek. xvi. 10, &c. taking the prophet's words *literally*. They say, also, that the clothes did not *wear* by use, but remained perpetually new; only they

“Grew with the growth, and strengthened with the strength,”

of the wearer; so that those made for children fitted them when grown up to maturity. Neither, say they, did their linen want washing, for the column of the cloud preserved them clean; moreover, it was also perfumed and fragrant, for so we read, Cant. iv. 11. “The smell of thy garments is the sweet smell of Lebanon.” What a pity that no remains of these everlasting, increasing, odorous, angelic vestments are preserved by their nation at this day! Is this *explaining*, or *debasing*, Scripture? *Credat Judæus.*

The meaning of this passage, to which we may add Nehem. ix. 21., may be, like that of any other passage, taken *too literally*; as may also Isaiah xlvi. 21. where the prophet says, *the Israelites did*
not

not suffer thirst in the desert; which is literally false, but relatively true, as their thirst was speedily satisfied.

VERSES 7, 8, 9.

The value of the good things here said to be produced in Canaan can hardly be estimated by us in Europe: *fountains, brooks, depths* of water, *wheat, barley, vines, fig-trees, pomegranates, oil*, [oil in the East answers the purposes of *butter* among ourselves,] and *honey*. And whose *stones* are capable of being smelted down to iron; and whose mines furnish *copper*, [not *brass*, this being a *factitious* metal, composed of *copper* as one part only, *zinc* being the other.] These plants and trees, &c. are too well known to require illustration.

VERSE 15.

Fiery SERPENTS, and SCORPIONS, and DROUGHT.

For the Fiery Serpents, see on Num. xxi. 9.

The SCORPION, Heb. *Okrah*, is an insect which has a *great sting*, as the word implies. The Arabs still retain the name; and there is no difficulty in determining the animal, which is an insect having eight feet, and two claws in front; the belly is divided into seven rings, and the tail into about six joints, at the end of which is the sting. In hot countries, as in the desert between Judea and Egypt, scorpions are companions with serpents, and their venom is equally fatal. Scorpions in Africa grow to a great size. I have seen some equal to a small lobster, which they somewhat resemble. Compare the article, and plate of the SCORPION, on Rev. ix. 3.

The word rendered in our version, DROUGHT, is thought by some to signify a serpent, whose bite causes an intolerable thirst, the *Dipsas*, Heb. *Tjimman*; this the Vulgate supposes; others, including the lxx, think it may signify a *thirsty, dry, uncultivated* desert, an arid waste.

CHAPTER XIV. VERSES 4, &c.

THESE are the beasts which ye shall eat; the OX, the SHEEP, the GOAT: the HART, the ROEBUCK, the FALLOW DEER, the WILD GOAT, the PYGARG; the WILD OX, and the CHAMOIS.

The first three names on this list of clean animals are well understood; 1. the OX; 2. LAMBS of sheep; 3. KIDLINGS of goats. I presume too, that the 4. is rightly rendered the STAG. The following are not without uncertainty:

5. The ROE-BUCK, Heb. *Tzebi*. This is certainly the *Gazelle*, or *Antelope*: as there are several kinds of creatures all referred to the antelope kind, I presume this may be that called the *common Antelope*.

6. The FALLOW DEER, Heb. *Jachmur*. This antelope still retains this name in Arabia; it inha-

bites the mountains of that country. NIEBUHR, *Pref.* xlii. It is frequent about the Euphrates.

7. The WILD GOAT, Heb. *Acco*. The versions uniformly render *Tragelaphus*. It is thus described by Dr. SHAW, p. 243.: "The *Fishtáll*, or *Ler-wee*, is the most timorous species of the goat-kind, plunging itself, when pursued, down rocks and precipices. It is of the bigness of an heifer of a year old; but hath a rounder turn of body; with a tuft of shagged hair upon the knees and neck; this near a foot, the other only about five inches long. It agreeth in colour with the *Bekker el Wash*; but the horns are wrinkled and turned back like the goats; from which likewise they differ, in being more than a foot long, and divided only, upon their issuing out of the forehead, by a small strip of hair, as in the sheep kind. The *Fishtáll*, from its size, shape, and other circumstances, seems to be the *Tragelaphus* of the antients; an animal, we are to suppose, such as this is, betwixt a goat and a deer. *Pliny* indeed observeth that it was peculiar to the banks of the *Phasis*; a mistake probably of the same kind with what immediately follows, that the stag was not an animal of *Africa*."

8. The PYGARG, Heb. *Dishon*. The translation *Pygarg* is Greek, and means *white rump*. Dr. SHAW thus expresses himself: "Besides the common *Gazell* or *Antelope*, (which is well known in Europe,) this country likewise produceth another species, of the same shape and colour, though of the bigness of our roe-buck, and with horns sometimes of two foot long. This the Africans call *Lidmee*, and may, I presume, be the *Strepsiceros*, and *Addace* of the antients. *Bochart*, from the supposed whiteness of the buttocks, finds a great affinity betwixt the *Addace* I have mentioned, and the (דִּישׁוֹן) *Dison*, which, in Deut. xiv. 5. our translation renders the *Pygarg*, after the the Septuagint and Vulgate versions." p. 243.

9. The WILD OX, Heb. *Tau*, or *Tav*. If it were not for disturbing the order, by introducing wild cattle among antelopes, I should pay considerable regard to what Dr. SHAW informs us, p. 242. where he says, "Of cattle that are not naturally tame and domesticated, these kingdoms afford large herds of the neat kind, called *Bekker el Wash* by the Arabs. This species is remarkable for having a rounder turn of body, a flatter face, with horns bending more toward each other than in the tame kind. It is therefore, in all probability, the *Bos Africanus* of *Bellonius*, which he seems justly to take for the *Bubalus* of the antients; though, what he describeth, is little bigger than the *Caprea*, or roe-buck, whereas ours is nearly of the same size with the red-deer, with which also it agreeth in colour. The young calves of this species quickly grow tame, and herd with other cattle." But, I observe, he informs us, that "the Arabs place among the *Bekker el Wash*," or cattle-

cattle-kind, "a species of deer." Is it probable that in the days of Moses these *Bekker el Wash* were themselves reckoned among the deer kind? If that might be, then I see no reason forbidding the conjecture, that the following is the Hebrew *Tzamor*, rendered by our translators, *Chamois*. The *Chamois* (goat) it certainly is not; as that creature seeks the coolest retreats, among mountainous regions; the Pyrennees and the Alps. An objection of the same nature lies against the *Ibex*, as being named in this list, Dr. SHAW says, p. 243, "The Arabs place likewise among the *Bekker el Wash* a species of the deer kind, which hath the horns exactly in the fashion of the stag's, but is in size only betwixt the red and fallow deer. Those which I have seen were caught in the mountains near *Skigata*, and appeared to be of the same mild and tractable nature with the *Bekker el Wash*. The female, having no horns, is called in derision, *Fortas*, the *Broad-Scalp*, or *Scall'd-Head*."

I do not know that we can hope, at present, to approach nearer to the true animals in the list of Moses; it is clear that they are residents in the same country, and pretty much of the same nature; we must therefore look for them in the same class of creatures, (the antelopes,) and identify them by descriptions of the best informed travellers; among which, we justly reckon Dr. SHAW.

VERSE 13.

This list of birds prohibited is pretty much the same as we have already considered, Lev. xi.; but the word written *Daiah* here, is there written *Daah*, (דאה, דיה.) Perhaps, a bird of the same genus, if not of the same identical kind, is meant in both places. In Isaiah, xxxiv. 4. the plural word *Daiuth* seems to include several varieties,—probably of *Hawks*.

CHAPTER XVIII. VERSES 10, 11.

THERE shall not be found among you any one that maketh his son or his daughter to pass through the fire, or that useth DIVINATION, or an observer of times, or an ENCHANTER, or a WITCH, Or a CHARMER, or a CONSULTER with familiar spirits, or a WIZARD, or a NECROMANCER.

We have in these verses specifications of various manners in which inquisitive spirits among men anciently sought information, on subjects beyond the usual ken of mortals:—the names given to these arts, most probably denote the different modes or practices of their professors. The first is:

1. *Kesem Kesamim*, (קסם קסמים.) Some suppose this is a general term:—divining divinations:
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playing the conjurer. Possibly it may mean dealers in talismans, or charms: these kinds of gentry we know are very numerous in the East. But I suspect, that the word *KES* has some alliance with *KETJ*, (קצץ,) to cut off; and as the conjurations enumerated in this passage seem to be of an evil, not a benevolent cast, I would query, whether this may not refer to witches, &c. who professed, if furnished with any thing belonging to a certain party, that they could, by means of it, bewitch the party himself, though absent. We meet with this idea in the poets of antiquity; and among the supposed witches of two centuries ago, this notion was frequent in our own country.

2. *An evil-eyer*, *Meounen*, (מעונן.) This also is an injurious kind of witchcraft; the stroke of the eye of some old hags was thought extremely malignant; and to abate, if not prevent the effect of it, by attracting the eye of the ill-designing person to somewhat else, in the first instance, a great variety of very strange ornaments was worn around the neck, &c. by boys and girls, among the ancients. They are well known to the curious in antiquities. Some of them are not very decent.

3. *Menachesh*, (מנחש.) The relation of this word to a *serpent*, has been observed by all commentators; who have usually supposed it referred to divination, by means of serpents—*Ophiomanteia*. That such divination was anciently practised, I am aware (vide *Iliad* ii. *Hor. Ode*, lib. iii.); but in this place, perhaps, it means, one who is to observe, inspect, watch, another to his disadvantage—insidiously:—or, to attract notice, with design to do mischief. So the brilliancy of the serpent's colours distinguish him; but his sting is fatal, as his watchings are malignant.—FASCINATION.

4. *Mecasheph*, (מכשף); *lxx. Pharmacos*; *Vulg. Maleficus*. I suspect that this may allude to those who gave potions to persons, with a view to delude them:—love-potions, or others, designed to produce effect after a time; which occasionally betrayed the recipients of them into great improprieties: some proved slow poisons, while others disturbed the rational faculties, or &c.

5. *Chober chaber*, (חבר חבר,) joining the junction; the Samaritan version reads, *asur asurim*; a tier of ligaments, or binding the bands. What these malevolent bands are, we may learn from *NIEBUHR*: when a young couple *se sont trouvés inhabile les premiers jours de leurs noces*, the bridegroom alledges that he is *Marbúd*, tied up: i. e. that some other woman who had hoped to have espoused him, has, by some secret charm, debilitated him by constriction.

6. *Shaal aub*, (שאל אוב,) a consulter of Ob.
That

That those who were supposed to consult *Ob*, were understood to raise the dead, appears from the instance of Saul, who desires his servants to find out one who was *mistress of Ob*, with design to consult the dead Samuel. This is properly *necromancy*. Nevertheless, as *necromancy* seems to be decidedly intended by the last name on the list, it should seem better to refer this to the Pythonic spirit, which those who recollect the oracles of Apollo, will be at no loss to understand: and of which we have an instance, Acts, xvi. 16.

Isaiah, xxix. 4. describes this *Ob* as speaking and muttering out of the dust; as peeping and chattering, viii. 19. The lxx. render *Ventriloquists*, and this may be the true meaning: a delusion by a natural particularity, yet reported as a supernatural possession, and practised for gain accordingly,

7. *Jadeoni*, (ידעוני,) *Fortune-tellers*, knowing-ones. Query, whether in this list there be any reference to predictive *second sight*? There are so many ways of attempting to pry into futurity, practised by this class of vermin, from the grounds in a coffee-cup, to the oracle of the sieve and sheers, that it would be endless to enumerate them, and useless to specify any in particular.

8. *Doresh al hemutim*, (דרש אל המותים) *Consulters of the dead*; or, *seekers to the dead*. This, being distinguished from *Ob*, in a former verse, seems to indicate, that *Ob* was not strictly, or at least, not constantly referable to the dead: but in what the distinction might consist, is unknown. That these persons were supposed to seek to the dead for information, in respect to futurity, I suppose is evident. Vide the evocation by Ulysses in the *Odyssey*, and other instances.

NIEBUHR mentions several kinds of occult sciences extant among the Arabs; some arising from slight of hand; others from ecstatic enthusiasm; others as charms against evil; lastly, he says, "the science *sibhr*, is, as described to me, witchcraft, sorcery. It is said to be employed only in hurting others; wherefore, those addicted to it, are hated and cursed by every honest Arab."

I have ventured to suppose, that most of the foregoing kinds of magic were of an injurious nature; which accounts for their being connected with the unquestionably injurious practice of burning children in the fire. *There shall not be found among thee one who maketh his children to pass through the fire*—that being evidently injurious; no, nor *one who injures by cutting off*—wasting away the life of another—(We have a supposed instance in British history, in the duchess of Gloucester; temp. Henry VI.) whether by means of any

garment, or other thing procured, or of waxen images, &c. melted, &c.; nor one who smites with *an evil eye*, and so diseases persons, especially children; nor one who *fascinates*, and deludes spectators, by misleading attention; nor one who employs *drugs* to effect unlawful purposes: nor one who endeavours to *constrict*,—to injure by debilitating the person.

These seem to be various degrees and branches of the malevolent art of injuring others, whether present or absent: and all these we know have been professed. The professors are prohibited by this law, but the prohibition determines nothing on the reality of the science.

The three following articles seem to refer to enquiries into futurity: a consulter of the oracular Pythonic spirit; a fortune-teller, whether by palmistry, or by any other *knowing* way; a seeker to the dead, or one, who by evocation proposes to bring a departed spirit from the invisible world, in order to procure information of what is about to come to pass.

As the foregoing distinctions are, so far as I know, unusual, they must be considered as *conjecture* only: but as *conjecture* founded on a knowledge of eastern ideas, many of which, by the bye, are not obliterated among ourselves.

That by means of astronomy we can calculate certain events among the celestial bodies, which, to the ignorant, seems to infer supernatural power and knowledge, is notorious; and hence the pernicious practice of judicial astrology, casting of nativities, or consulting the stars, in order to predict events relating to individuals, took its rise. (Vide Herod. lib. ii. cap. 82. Jer. x. 2.)

That the knowledge of certain operations in nature, which are surprising, and which are justly called natural magic, seems to confer on the possessor of that knowledge, supernatural powers is indisputable: and hence arose conjuration, cups and balls, &c. most deceptive and illusory trickings! But nothing is more diabolical than attempts to injure others by witchcraft, by maiming their effigies, by roasting their waxen images till dissolved, by paining their persons, by communicating diseases, &c. These are hellish inflictions; from the burning brand of Meleager, to the pins and needles of English or Scottish hags. They are forbidden with the utmost propriety, as evil in the disposition of mind which they imply, without inferring any efficacy in such incantations, or any effect attending such abominable mal-practices; which still prevail in very many places, as well of Africa as of Asia.

CHAP.

CHAPTER XXII. VERSE 9.

THOU shalt not plant in thy vineyard (or orchard) diverse sorts of plants.—See the same precepts in effect, Lev. xix. 19.

The same aversion from *mixture*, seems to have dictated the prohibition in the following verse, against ploughing with an ox and an ass, harnessed together. The precept seems also to regard the unequal size and strength of these animals: it would be cruel to urge the weaker to the same exertions as the stronger; while to lay the whole burden on the stronger, is to derive no assistance from the weaker: not to mention the different temper, paces, speed, height of figure, &c. of the two unequal yoke-mates. Vide Plautus, Aul. Act. ii. Scene 2. Anthol. lib. i. cap. 33. Paulinus (to Ausonius) also Homer, Od. xviii. and Palladius, lib. iv. mention well matched oxen, and caution lest the stronger overwork the weaker. That both asses and oxen (separately?) were employed in cultivating the ground, see Isaiah xxx. 24. xxxii. 20. Josephus, contr. Ap. lib. ii. Varro de Re Rust. lib. ii. cap. 6. viii. cap. 1.

Some suppose that the ox being a pure animal, but the ass being impure, the import of the precept is to forbid the intimate association of clean and unclean, see 2 Cor. vi. 14. an excellent moral use results from this view of the precept.

VERSES 13.—21.

The particularities mentioned in these verses are fully explained and vindicated by NIEBUHR; who found the same principles still in force among the Arabs in Yemen, where he travelled. He observes, that as the husband by presents, &c. pays the father of his wife, and may be said to purchase his daughter, under a certain description and character, so far as she differs from that character the husband is deceived and injured; and this deception justifies his returning his wife to her father, and re-demanding his presents, &c. This, as may be supposed, must vex and dishonour the whole family of the woman so repudiated, and were it a frequent occurrence, must spread animosities and jealousies throughout not a family only, but a country.

CHAPTER XXVIII. VERSE 22.

THE Lord shall make the pestilence cleave to thee—shall smite thee with

1. *A Consumption, &c.*—SCHEUZER thinks this list of diseases comprises those of an inflammatory nature.—Perhaps, *shachephat* rendered *consumption*, is the *buboe*, or pestilential swelling, rising, for the most part, under the arm: many instances

of which, are noticed in Dr. RUSSELL on the plague. No doubt the disease is of a contagious nature, being threatened to the whole people.

2. *Fever, karachat*, this is the general sense of the word, adopted by interpreters. It seems to imply a continued, long continued burning heat.

3. *Daleketh*, inflammation, heat:—but Dr. GEDDES thinks it is the *ague*.

4. *Charchar*, devouring heat:—Dr. GEDDES renders *inflammation*.

5. *Chereb*, thirst, burning drought.

6. *Shidaphun*, perhaps the miliary (*mal-aria*) fever. Greek, ἀνεμοφθόρια, corrupted air.

7. *Jerakun*, the jaundice: perhaps, says SCHEUZER, “deadly paleness.” Jer. xxx. 6.

If these diseases be such as arise from a violently heated state of the atmosphere, from a want of cooling rains and refreshing dews, then we see the connection and climax of the whole, in the following verses: “Thy Heaven—atmosphere—over thy head shall be brass; and the earth under thee shall be iron. The Lord shall make the rain of thy land powder and dust: from heaven—the atmosphere—shall it come down on thee, till thou be destroyed.” Vide FRAGMENT, No. clxxii.

VERSE 27.

1. *The ulcer of Egypt, shechin*: was this the *Elephantiasis*? said by Pliny, and Lucretius, lib. vi. to be peculiar to Egypt.

*Est Elephas morbus, qui propter flumina Nili
Gignitur Ægypto mediâ, neque preterea usquam.*

2. THE HEMORRHOIDS, *ophelim*, this is the general sentiment of interpreters; but the lxx. consider this word as denoting the seat of the disease intended by the foregoing word, in which case that word cannot denote the *elephantiasis*. Query, May that describe a *fistula in ano*, seated pretty high internally, while the *piles* being seated lower, and more external are intended by this word *ophelim*?

3. *Odeb*, a purulent scab.

4. *Chares*, a dry scab.

VERSE 35.

The Lord shall strike thee with a sore botch on the knees, in the legs,—from the sole of the foot, to the crown of the head.—This seems to be a correct description of the *Elephantiasis*: and of this the sacred writer says, *it cannot be healed*. The introduction of this malady in this verse, renders very unlikely, that it should have been intended in verse 27. See on Lev. xiii.

The *Elephantiasis* is a kind of vehement leprosy, in which the body becomes covered with a foul, ulcerous hardened skin, &c. which resembles the skin of an elephant. "In process of time, tumours are formed in different parts of the body, and these tumours degenerate at length into *incurable sores*, which successively corrode deeply into the flesh." MICHAELIS, Quest. lxxi. As no cure has hitherto been discovered for this disease, it agrees perfectly with the description given by Moses.

CHAPTER XXIX. VERSE 18.

A Root that beareth gall and wormwood.

Gall is an animal secretion, and therefore is improperly attributed to a vegetable, a root: yet, as some vegetables afford a juice as bitter as *gall*, that juice may with propriety be associated with wormwood. *Jeremiah*, ix. 15. xxiii. 15. speaks of giving the people "wormwood to eat, and water of *gall* to drink;" i. e. water in which a bitter plant had been infused; or the juice of a bitter plant mixed. This, *Lam.* iii. 15. he changes for *bemerurim*, bitternesses; or rather, from the same root, *myrrhs*: "he hath filled me with bitter potions drawn from myrrhs; he hath inebriated me with bitter juices pressed from wormwood." See also *Amos* vi. 12. Now, if *myrrh* and *bitterness* were analogous terms in the ancient Hebrew, as these passages, at least, insinuate, then we infer the identity of meaning in the different words used by the evangelists, *Mathew* and *Mark*, to denote the same thing. *St. Mathew* says, "wine mingled with *gall*."—*St. Mark* says, "wine mingled with *myrrh*."—It is easy to see from the subject before us, that there is no contradiction in these words, but both mean the same thing: not animal *gall*, but a bitter potion drawn from a vegetable drug—i. e. *myrrh*. And the original Syriac term was equally well translated by either of these words.

As to the word rendered *wormwood*, the disagreeable effects attributed to this plant, do not accord with the wormwood, of Europe, since that is rather a salutary herb, than a mortal poison; which character, it has in the Chaldee version "wormwood of death." Possibly, therefore, the true *wormwood* may not be designed, but some plant allied to it, either in form or appearance; in taste, or in qualities: or which, if it be of the same class, differs by its more formidable properties. Wormwood causes "bitterness in the belly," *Rev.* x. 9, 10: but I do not find *deadly* effects attributed directly to *wormwood* in Scripture: perhaps, the Chaldee interpreter may have rather exceeded in his version.

CHAPTER XXXII. VERSE 13.

THOU shalt suck honey out of the rock:

Judea abounds in wild bees, which hiving in the rocks, furnish honey. See the instance of *Jonathan*, 1 *Sam.* xiv. 25. *Hasselquist* says, between *Acra* and *Nazareth* "great numbers of wild bees breed, to the advantage of the inhabitants." *Maundrell* observes of the great salt plain near *Jericho*, "that he perceived in it in many places, a smell of honey and wax, as strong as if he had been in an apiary;" p. 66. 86. See the wild honey the food of *John the Baptist*, *Math.* iii. 4.; *Mark*, i. 6.

Oil out of the flinty rock; i. e. the olive-trees grow in the crevices of rocks, and these yield oil. *Hasselquist* tells us, p. 117, that "he ate olives at *Joppa* which were said to grow on the Mount of Olives, near *Jerusalem*; and that independent of their supposed holiness, they were of the best kind he tasted in the Levant." That *Syria* abounded in oil is evident, from its being exported into *Egypt*, *Hosea* xii. 1. and we find *William of Tyre*, in the time of the crusades, describing *Syria-Sobal* as all thick set with olive-trees, making prodigious woods, that covered the country, and afforded subsistence to the inhabitants.

N. B. It may be queried, whether as this production, *oil*, is yielded by a vegetable, a tree; the foregoing production, honey, be not meant for what is yielded by a tree also? To support this idea, we remark, that the honey of the palm-tree is in no little esteem in the East; and we find a distinction in *Solomon's Song* between the firm honey, and the flowing honey. Beside palm-honey, the Jews mention honey of the fig-tree. Vegetable honeys might now, perhaps, be referred to the class of sugars, which we know are yielded by several vegetables beside the sugar-cane.

VERSE 32.

Their grapes are grapes of gall, (*RUSH*, רֹשׁ) *their clusters are bitter*, (*mararat*.)

Gall is not a vegetable juice. A plant bearing berries, formed somewhat at least, into clusters, resembling those of the vine, is what we want:—can it be *hemlock*? of which there are, the *cicuta major*, and the *cicuta aquatica*, which is a very noxious plant.

Hasselquist, speaking of the wild grape of Scripture, *Labrusca*, observes, "Isaiah says, chap. v. 4. what could I do more for my vineyard than I have done, yet it produced *wild grapes*?" I believe the prophet here means to speak of the *solanum incanum*, (*deadly nightshade*,) seeing it is common in *Egypt*, in *Palestine*, and throughout the East. Moreover

Moreover, the Arabs give it a name which agrees perfectly with his expression, they call it *Aneb-il-dib*, wolf's grape. The prophet could not have chosen a plant more opposite to the vine, for it grows in vineyards, and does infinite damage to them; therefore, it is carefully rooted out. It resembles the vine, by the creepers which it produces." This is the nearest approach to the vegetable intended by Moses, which is hitherto discovered; but why attribute particularly to Sodom and Gomorrah a species of plant which grows in many places throughout the East? I conceive, therefore, that if the wild grape may be the deadly nightshade, which grows in our own hedges, and is occasionally eaten by children to their great danger; yet that the grape of Sodom is a plant growing in the neighbourhood of the Dead-Sea, and named from its native soil. I shall therefore add, from *Hasselquist*, that he found at Jericho, the *solanum fruticosum quadripedale, caule et foliis spinosis*, the nightshade." Also, that, "the *Poma Sodomitica*, the apple of Sodom, is the fruit of the *Solanum Melongæna* of Linnæus, called by others mad apple. It is found in great quantities near Jericho, in the valleys near the Jordan, in the neighbourhood of the Dead-Sea." If this fruit causes madness, if it grows near the city of Sodom, and retains the name of *Sodomitica*: may it be the vegetable intended by Moses? does it sufficiently resemble the vine to be compared to it?

We are not bound to take, *strictly*, the word rendered *grape*, or the word *vine*, to signify only a grape vine: it is a word common to many kinds of plants. To distinguish the true vine, Moses adds its description "the *wine vine*," Numb. vi. 4.

* * This query in reference to the apple of Sodom, has been partly answered, by M. Seetzen (who some years ago travelled round the Dead Sea, and whose Travels were published in 1810, after his death) and of his Editor. The plant exists not only on the shore of the Dead Sea, but on the sandy borders of the Nile, above the first cataracts. It is about three feet high: the fruit is somewhat like a bladder; of a bright green colour. On being cut, or pressed, it yields while fresh and flourishing an acrid milky juice: in winter, when dry, it yields only a yellowish dust, greatly resembling that of puff-balls, which grow in our woods, and which by its pungency greatly imitates and injures the delicate membranes of the eyes, the eyelids, &c.

CHAPTER XXXIII. VERSE 17.

HIS glory is like the firstling of a bullock, and his horns are like the horns of unicorns: with them he shall push the people together to the ends of the earth: and they are the ten thousands of Ephraim, and they are the thousands of Manasseh.

On the comparison of Joseph to a Bull—observe, that if the *Reem*, to which he is also assimilated instantly after, be a bull, the comparison would refer but to one creature; whereas, it is evidently intended to compare two creatures: this is no slight argument for two very distinct animals: 1. the wild Bull; 2. the Reem. See on Job xxxix. RHINOCEROS, Plate I.

VERSE 19.

They shall suck the abundance of the seas, i. e. fishes of various kinds, perhaps, especially including shell-fish: *and treasures hid in the sand*; i. e. some say, they shall make glass, which is procured from sand; and which, say *Pliny* and *Tacitus*, was first made from the sand of the river *Belus*, in Judea. That the river *Belus*, which ran at the border of the tribe of Zebulon, yielded sand very proper for making glass, may be granted, without affirming that glass was first made here. Vide *Strabo*, lib. xvi.; *Pliny*, lib. v. cap. 19.; *Tacitus*, Hist. lib. v.; *Josephus de Bell.* lib. ii. cap. 9.

VERSE 25.

Thy shoes shall be iron and brass. This verse informs us that shoes *clouted*, as the old English expression is, were used as early as the days of Moses. We know that the Roman soldiers used brazen or copper soles to their shoes; and *clouted* shoes, i. e. shoes well coated with iron, were anciently part of a soldier's dress in this country, from which shoes well filled with nails, &c. for strength, are now called *clouted*.

It will be remarked, that the language of poetry is always of an elevated, or a metaphorical kind; when a poet affirms a thing in most direct terms, we are to qualify his affirmation if we would reduce his language to common speech, and design it to be strictly understood. When Moses says, Israel shall *suck honey out of the rock*, we are not to suppose that an Israelite taking a piece of rock into his mouth might suck honey out of it: that it would melt in his mouth; or that the flinty rock would dissolve in oil, at command.—That Zebulon may *suck the abundance of the seas*, or *treasures hid in the sand*, previous labour is understood, though omitted by the bard; and so of other images and ideas, which the animated strains of poetry do not stop to explain, or to account for. Let no one think this remark superfluous, since we know those who take Scripture expressions *literally*, and suppose that the Holy Land *flowed* with milk and honey; and since these *rapidities* of poetry often occasion great perplexity to the calmly investigating naturalist, who wishes to obtain information on an article mentioned, and neither to attribute to it qualities above or below its fair and just estimation and properties.

AN
EXPOSITORY INDEX

TO THE BOOK OF

JOSHUA,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER II. VERSE 6.

RAHAB hid the spies under stalks of *Flax*. This sense of the word is generally admitted. As the order of the original is peculiar, *in flax of wood*, or woody stalks, some have thought *hemp* to be the plant intended, as its stem is most woody. *Alpian* remarks, (in *Deg.* lib. xxxii. *Leg.* 55) that under the name of *wood*, some countries comprehended thorns, thistles, and other *stemmy* plants: especially in Egypt; where reeds and rushes, and the plant papyrus, were used as wood for burning. I apprehend the Hebrews did the same.

VERSE 18.

Bind this line of scarlet thread in the window, by which thou didst let us down. It is probable that this *line* was something more considerable than a mere *line*; as well for being distinguished from a distance, when hung in the window, as for its use in lowering the men. *Le Clerc*, therefore would render *this tissue of scarlet thread*;—and in the Chaldee, the root signifies a weaver.—Perhaps our window curtains may explain the idea.

CHAPTER III. VERSE 4.

THE PASSAGE OF THE JORDAN.

THE depth of this river, at this time, is among those particularities which require acquaintance with nature, in order properly to understand them.

We know that the river Nile rises annually, but Jordan does not rise *every* year; only at times it overflows its banks. The probability is, that, according to that aspect of the mountains of Libanus, on which the snow of the preceding year has fallen, and on which this snow, with the accumulations of several years in succession, is melted by the sun in summer, the stream of the river Jordan

is augmented, or not. So that when the snow has fallen on the south of the mountains, it is exposed to the solar beams, is thereby dissolved, and issues from them in considerable streams, running south into *this* river, instead of running east or west into other torrents. This may account for the occasional swelling of the Jordan. Vide *Wisdom*, xxiv. 28. 1 *Chron.* xii. 15. *Jer.* xlix. 19. l. 44.

It is necessary to account in some such manner, for the *occasional* swelling of Jordan; because, no modern traveller, that I know of, has seen it in the state of overflowing, though some have been there at such times of the year as it anciently did overflow; for Mr. MAUNDRELL was there, *March* 30, which, 1 *Chron.* xii. 55. is mentioned as a proper time, “the first month.” That worthy traveller observed, that Jordan, has two banks, “the first, and outermost, as far as it may be supposed the river does, or did overflow.—After having descended the outermost bank, you go about a furlong on the level strand, before you come to the immediate bank of the river.”—Now, as the river certainly formed the outermost bank by its inundations, this bank is a lasting testimony, that it sometimes overflows.—As we find it extends a furlong, at least, on this side, add an equal extent on the other side, together with the breadth of the river, “about twenty yards,” for the quantity of water passed over by the Israelites, under Joshua. In proportion as the swelling of Jordan was rare, and the security of the Canaanites was increased by it, the passage of the river by Israel, was a more illustrious instance of Divine interposition.

CHAPTER V. VERSE 2.

FOR what we have observed on the circular stones which composed the sacred precincts of GILGAL, vide on Judges, iii. 9. the Plate.

We

We shall only notice, at present, the operation of circumcision performed in this place. The instruments were *Charbuth tjerim*, rendered by the lxx. *knives of cutting stone*; by our margin, *knives of flint*: this rendering indeed assumes that *flint* was the kind of stone used for cutting, which, perhaps, may be doubted; but that the knives, or cutting instruments, were of stone, of some kind, can be no doubt.

The great number of stone hatchets and knives found in Britain, and occasionally even the manufactories where they were made, leaves no room to question whether, apart from the use of iron, stones might not be sufficiently sharpened to answer the purposes of that metal. I presume, therefore, to take for certain, that the ancient stone knives of our own country, were similar to those of the East; and this adds one to the similarities observable between peoples so distant.

Another inference is, that as iron was forbid to be used in forming the altar of God, because it was a sacred utensil, so, perhaps, the use of iron was forbid in this circumcision, because it was a sacred service. Nevertheless, we see with what instruments rough stones might be chipped, and cut into a certain degree of form, without the use of iron tools; that is to say, by employing the harder kinds of sharpened stones in that labour. N. B. This removes some objections to the great antiquity of certain Druid erections in Britain, which have evident traces of some kind of cutting tool having been used to diminish the asperities of their surface.

After these remarks, it is hardly necessary to refer to what writers of antiquity have hinted, on the use of knives not made of iron, in circumcision. The Romans called these cutting stones *Testa*, *Samia Testa*. With such a knife, says *Arnobius*, (*contra Gentes*, lib. v. p. 94.) Atyr emasculated himself; and *Ovid* (*de Fast.* lib. iv. v. 237.) calls such an instrument *saxum acutum*, a sharp stone.

Ille etiam Saxo corpus laniavit acuto. . . .

Ah! pereant partes, quæ nocuere mihi!

Ah pereant! Dicebat adhuc, onus inguinis aufert,

Nullaque sunt subito signa relictæ viri.

Pliny, lib. xxxv. cap. 12. says the same of the priests of Cybele. See also Exod. iv. 25.

CHAPTER VI. VERSE 20.

THE falling of the walls of Jericho, is among the most striking of the miracles attending the entrance of Israel into the promised land. So far as it is miraculous, a naturalist has nothing to say

on it: there is no harm, however, in hinting that, the shouts of the people could never effect such an event; because, whatever may be the force of aerial vibrations produced by the voice, &c. in a confined vessel, such vibrations in the open atmosphere would surely expand themselves where they found the least resistance; and this would never be, where the walls of Jericho impeded their passage, but where the free air offered no impediment. The choice of *secondary* causes would probably determine on an earthquake.

CHAPTER X. VERSE 11.

DAY MIRACULOUSLY ENLIGHTENED.

THE miraculous prolongation of the day-light, which followed the command of Joshua, has been the subject of our investigation in another place [Vide FRAGMENT, No. cliv.] where we endeavoured to shew, that it was not the *body* of the sun, but the *solar light* which stayed; nor the *body* of the moon, but the brightness of her rays, then near the full, which assisted the hero of the sacred tribes: that the time of year was the summer solstice, and that the miracle consisted in producing, by a peculiar refraction of the air, that degree of light so far south as Judea, which in Scotland, in Sweden, in Greenland, is a necessary result of natural causes, not once only, but every year.

We ought, however, to notice the quantity of HAIL STONES which fell at this time; "great stones from heaven,"—the atmosphere—which being driven in the faces of the enemy, not only dismayed, but destroyed them; and that in greater numbers than fell by the sword of Israel.

We may be dispensed with from proving that such an occurrence is not incredible; as we have many instances of armies suffering more from the violence of the elements than from their enemies: and as this battle was fought by night, if the hail-storm was by night also, it would be doubly distressing to a flying army. That hail kills animals we have proofs almost yearly, in our own country; that it may kill men, and in great numbers, is easily inferable; the height at which it may be generated, is unknown to us: and this is all that requires admission, to justify the notion of its being fatal by its size and velocity.

CHAPTER XVIII. VERSE 9.

ANTIQUITY OF MAPS.

THE agents sent by Joshua, *went and passed through the land, and described it by cities into seven parts in a book*. The awkwardness of this phraseology, *describing into seven parts*, is sufficient to

to justify the notion that it does not express the true sense of the passage. In fact, I apprehend, we have here mention of a MAP of the country, drawn on a considerable scale, shewing every city, and its boundaries, on seven sheets, which, united together, formed a book. This, then was little or nothing different from the *Military Maps* of our own time, which contains every particular of hill and dale, of streams, trees, roads, passes, bridges, and other distinguishable objects for the guidance of the general, his plans, movements, &c.—

To justify this idea we must examine the terms of the passage.

The word used to signify “describing,” or *delineation*, is *cuteb*: this, Lev. xix. 28. expresses the making of marks in a certain form, or after a certain pattern; a representation of flowers, figures, or places, (*i. e.* the outlines of such things.) “ye shall not make any *cutebuth* (“print any marks.” *Eng. Tr.*) on your flesh.” This could never mean, ye shall not make lines of writing—*inscriptions*—on your flesh; but must refer to a pattern, or delineation, made by puncture, of flowers, trees, &c.; in short, a kind of tattowing. But this word *cuteb*, evidently, and beyond controversy, means the *delineation* of the plan of a house, Ezek. xliii. 11. “*the figure of the house*, its elevation, and the disposition of it, its plan; the goings out, the entrances in, and all the forms thereof, and all the *DELINEATIONS* thereof (Vide Ezek. iv. 1.) shalt thou make them know, and (*cuteb*) draw—delineate to their eyes.” It is clear, that to describe by writing the *forms* of the elevation, plan, apartments, ornaments, doors, door-cases, passages, &c. &c. of a great house, is an utter impossibility: not to say, that *to write before the eyes*, literally *TO the eyes* of spectators, is a strange expression; whereas, to delineate, or portray, before their eyes, the very forms of the things designed, is an easy procedure, an easy sense of the word, and an easy mode of conveying information.

It needs no proof, that the same word which describes the delineation of the parts of a house, may describe the delineation of the parts of a country, *i. e.* a MAP; and this sense agrees perfectly with the occasion. “*The men departed and went over the land, surveyed it, and delineated it,*

to the very cities, in seven divisions, on a (sepher) book—letter—MAP.”

This explains the order given by Joshua, verse 4. “describe it according to the inheritance;” which we know was the annual custom in Egypt, after the waters of the Nile had subsided; when each cultivator took his land, as allotted to him by measurement.

The antiquity of *maps* being thus established at the days of Joshua, we may extend our enquiries somewhat further back. That Abraham dwelt in Egypt we know; that he *taught* the Egyptians mathematical sciences, as arithmetic, astronomy, and geometry, is asserted by Josephus, *Antiq. lib. i. cap. 18*. Without affirming that he *taught* them, we content ourselves with concluding that he *knew* them. No doubt, he was instructed in them by Shem; and if so, it will follow, that both Abraham and Shem might have delineations, *i. e.* *maps* of the countries through which they travelled; and moreover, this might be *one* mean of ascertaining the division of the earth among the sons of men; and of determining the Land of Promise to Abraham and his posterity: which was a well known fact. Gen. xii. 1. xvii. 18. Josh. ii. 9.

The inference of the cultivation of arts and sciences in the early periods of time, has great influence on many particulars only hinted at, in various parts of Scripture. By what means geographical delineations were made, we do not know; but we have reason to think, that most of the arts which are known to us were not unknown to the early ages:—and this art of delineation, in conjunction with that of writing, is necessary to be admitted, in order to form a just estimate of the advantages and privileges, the means of knowledge and of grace, imparted to those, whose history we peruse for edification and example. Vide on the Babylonian Bricks, Genesis xi. Plate. For a conjectural suggestion on the still deeper antiquity of Maps, vide on Genesis xli. 5.

CHAPTER XXIV. VERSE 12.

I sent the HORNET before you. See on Exodus xxiii. 28.

AN EXPOSITORY INDEX

TO THE BOOK OF

JUDGES,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER V. VERSE 20.

THE stars in their courses fought against Sisera.

We have elsewhere supposed, that the river *Kishon* being swollen by a heavy rain, which had fallen during the night, (a frequent occurrence, as we learn from MAUNDRELL) might prove fatal to many of the soldiers of Sisera; beside this, if, after the clouds were dispersed, the sky became clear again, and a bright star-light night followed, which we often see in our own country; then, the light of these stars, might embolden the fugitives to attempt fording the stream; but the rapidity of the current soon demonstrated the fatal consequences of their imprudence; or, the twinkling of the stars might induce these Syrians to attempt crossing the river at improper places, which proved destructive to many. Both these suppositions might be true; and in either, or in both of these senses, the stars might fight against Sisera, by contributing to mislead, and so to destroy his army. To recur to any notions of judicial astrology on this text, is to do it unnecessary violence. *Josephus*, (*Antiq.* lib. v. c. 5.) supposes a tempest; which beat full in the faces of the enemy, and consequently was at the backs of the Hebrews. This is very reconcileable with our notion hinted above.

The word rendered *courses*, is an astronomical term, which *Le Clerc* renders *orbits*: this is not amis; but taking *courses* in an astronomical sense, it is quite as proper and expressive.

CHAPTER VI. VERSE 19, &c.

GIDEON'S FLEECE.

AFTER having witnessed the miracle of fire issuing from a rock, merely on its being struck with the end of a walking-stick, Gideon must, no doubt, have been well satisfied in his own mind, that he was commissioned by an authority, and directed by a power, that would not desert him.

M

I think it probable, therefore, that the miracle of the dew on the fleece, was a kind of *public* testimony, to satisfy his officers, who we find, in the preceding verse, *were come up to meet him*, from Asher, Zebulun, and Napthali. Thus understood, we see the reason of its repetition with an opposite variation; for, if there were any of his adherents who suspected deception in the first instance, when the threshing-floor was dry, and the fleece was wringing wet with dew, they might be convinced by the contrary effect, when the fleece was dry, and the threshing-floor was wetted with dew. The terms of this history are very express for the fact narrated.

The word (*sephel*, סֶפֶל) rendered *bowl*, "a bowl full of water," occurs also, chap. v. 25. Jael brought to Sisera "butter, (it should be *thick cream*) in a *sephel adirim*, a capacious bowl; (literally, *a bowl of capacities, a bowl of containings*, plural; *i. e.* adapted to contain a great quantity. For this sense of *Adir*, vide FRAGMENT, No. cxlv. p. 101. In the *Mishnah*, (*Bava Bathra*, cap. 4.) this word denotes a wash-hand bason, lxx. λεκανην. According to *Atheneus*, "a brazen vase like a kettle, with a handle on each side"—a porridge pot. And the consideration that the food offered to Sisera, was fluid like cream, not solid like our butter, leads rather to the rendering of *bowl* than *dish*.) We infer, that this *sephel* was no diminutive vessel, which Gideon filled with the expressed dew, but a bowl of considerable dimensions. So also, we read of the counterpart miracle, that the dew was upon the *whole earth*. To understand properly the nature of these miracles we should consider the open area, and extent of threshing-floors in the East, their exposure, size, &c. for which, see FRAGMENT, No. xlviii. page 83. with the plate.

We have no need to enlarge on the nature of dew; to observe that it falls in still, quiet, weather; that it is easily dissipated, or directed by wind, &c. The reader will observe for himself, that whatever objections might be started against one of these miracles, they are obviated by the other.

CHAP.

CHAPTER VIII. VERSE 16.

AND Gideon took the elders of the city, and thorns of the wilderness, and briers, and with them he taught the men of Succoth.

These thorns of the wilderness, are the *Kutj* of Gen. iii. 18. but the briers are denoted by a word different from that there used, *Barkanim*. There is no doubt but this word means a sharp jagged kind of plant: the difficulty is, to fix on one, where so many offer themselves. The lxx. preserve the original word. We should hardly think Gideon went far to seek these plants: the thorns are expressly said to be from the wilderness, or common, hard by; probably, the *Barkanim* was from the same place. In our country this would lead us to the black-berry bushes on our commons; but it might not be so around Succoth. There is a plant mentioned by HASSELQUIST, whose name and properties somewhat resemble those which are required in the *Barkanim* of this passage. "*Nabca Paliurus Athenei*, (Alpin. Egypt. 16. 19.) the *Nabka* of the Arabs. There is every appearance that this is the tree which furnished the crown of thorns which was put on the head of our Lord. It is common in the East; a plant more proper for this purpose could not be selected; for it is armed with thorns; its branches are supple and pliant, and its leaf of a deep green like that of the ivy. Perhaps the enemies of Jesus Christ chose this plant, in order to add insult to punishment, by employing a plant approaching in appearance, that which was used to crown emperors and generals." I am not sure whether somewhat of the same ideas did not influence Gideon: at least, it is remarkable, that though in verse 7, he threatens to thresh the flesh of the men of Succoth with thorns, i. e. to beat them severely, yet in verse 16, it is said he taught—made to know—perhaps, made to be known by wearing them, as at once insult and punishment. The change of words deserves notice; and so does the observation, that "he slew the men of Penueh," which is not said of the men of Succoth. If the *Nabka* (*Nabaka*) of the Arabs might be the (*Na-*) *Barkan* of this passage, the idea of its employment is remarkably coincident in the two instances. [Query. Was the wearing of this plant as a punishment, indicative of treason or rebellion? was it therefore worn by the men of Succoth, and by the (supposed) King of the Jews? John xix. 2.]

CHAPTER IX.

JOTHAM'S FABLE OF THE TREES.

THIS apologue has always been admired for its spirit and application; it has also been con-

sidered as the oldest fable extant; but, the production of certain Indian fables of great antiquity, deprives this particular of the certainty it was formerly understood to possess.

As to the nature of the trees of which the fabulist speaks, we are pretty sure of most of them. The olive-tree, the fig-tree, the vine, are well known; and the bramble seems to be very well chosen as a representative of the original, *Atad*: for probably, that vegetable should be a tree, bearing a fruit of some kind, which is associated, though by opposition, with the vine, &c. That this *Atad* was used for the purpose of burning, we have the evidence of the Psalmist, lviii. 9. "before your pots can feel (the fire, that is, of) the thorn"—*Atad*. The bramble of Britain is a kind of raspberry;—whether this *Atad* of Judea is of the same class, we do not determine: *Hasselquist* does not mention it; and the rendering of the lxx. *Rhamnus*, seems to hint at a different kind of thorn: indeed there are so many plants which are reckoned among thorns, that it is by no means easy to identify those which bid the fairest to have been selected by the sacred writers.

SCHEUZER gives the preference on this occasion to the *Rhamnus*, or *Nabca Paliurus Athenei*, which in the foregoing article *Hasselquist* had selected for the crown of thorns of J. C. It is certain that such a tree is required as may well denote a tyrant; one who instead of affording shade and shelter to such as seek his protection, strips them of their property, as a bramble-bush does the sheep which come near it, or lie down under its shadow. At the same time this tree being associated with those which bear valuable fruit, it should appear necessary to fix on some bush producing fruit also, as most properly answering to this *Atad*.

VERSE 13.

Wine which rejoiceth the heart of GOD and MAN: read, "of PRINCE and PEASANT," taking the word *aleim* in the sense of DIGNITARY, as already hinted. That wine cannot rejoice the heart of the Deity, is evident to every thinking mind; and the word for man is not *aish*, a sovereign, but *anush*, *anushim*, signifying poor, weakly, infirm, or low-conditioned men. Our present rendering is a gross impropriety; which is not diminished by accommodation to the sacramental wine.

CHAPTER XIV.

SAMSON AND THE LION.

THE lion slain by Samson, we may suppose differed nothing from ordinary beasts of the same species. The history expressly remarks that it

it was a *young* lion; and that, though he roared against Samson, yet he met his fate at the hand of the vigorous Hebrew. That lions were not uncommon in Judea appears from many passages of Scripture: *inter alia*, Jer. v. 6. 2 Kings, xvii. 25. 1 Sam. xvii. 24. 2 Sam. xxxiii. 20. *John Phocas*, writing concerning Judea, six centuries ago, says, that troops of lions inhabited the thickets around Jordan: and *Jerom*, on Zach. xi. attests the same fact. *Aristotle* and *Pliny*, mention the lions of Syria.

It is probable, that Samson suffocated this lion; pressed him so closely as to stifle him; as we say, to *throttle* him. The swarm of bees, which, after a time, (how long a time, we know not; see on Gen. i. fourth day,) had settled in the remains of the lion, demonstrates that this insect was very numerous in Judea; this swarm, then, might as well settle in the cavity within the dry boney ribs of this lion, as in the cavity of a rock; and it is every way credible that the skeleton of this animal was thrown into some very private place: as Samson *turned aside to visit it*. That bees have swarmed in dry bones, we have the testimony of *Herodotus*, lib. v. cap. 114.; *Seranus*, and *Aldrovandus*, Insect. lib. i. p. 110. Indeed, as bones in their nature, when dry, are exceedingly dry, there is no more to be said against such a residence for bees than against the same among stones, rocks, &c.

If these conjectures be reasonable, it will follow that Samson experienced considerable delays in his Philistine courtship. Bees do not form combs, and produce honey, in a moist carcase; nor at all times of the year; nor in a few days time. These considerations may, perhaps, contribute to support the idea that the word rendered *days*, means a considerable portion of time, though it will not determine that portion to be the extent of a year. Perhaps Samson, though strong, as a champion, might be little persuasive as a lover.

SAMSON'S RIDDLE.

The riddle of Samson is an instance from Scripture of a practice common in the East; the proposing of ambiguities and *enigmas* for solution to a party met for merriment. We ought to observe, on this history, the duration of the marriage-feast—seven days; the number of the bridegroom's companions—thirty; the office of the bridegroom's friend,—with the probable conjecture, that the person who sustained this character in respect of Samson, took liberties with the bride, which were highly repugnant to the confidence of his situation: he afterwards married her.

The practice of proposing riddles was not confined to private persons: we see it in the History of the Queen of Sheba, who visited King Solomon;

and in addition, Josephus relates that Hiram King of Tyre proposed similar questions to Solomon, who also proposed others to Hiram. Plutarch in his Banquet of the Seven Wise Men reports those which, in like manner were proposed by Amasis King of Egypt to the King of Ethiopia. He reports also, elsewhere, the enigma proposed to determine the degree of merit between the poets Homer and Hesiod. In short, the custom was familiar in the East; and it has much in common with the fondness for fable and hyperbole which distinguishes the Orientals.

It is worth while to notice several phrases used in this story;—as, 1. The character of honey, as the prime of sweets then known; sugar not being in common use.—2. The equivocation in the word *strength*,—implying *strength* of limb and powers; and *strength* in reference to smell, or taste.—3. The expression of *ploughing with my heifer*, to signify—committing improprieties with my wife: as this is not a phrase in use among ourselves, it may be agreeable to see it justified by equivalent expressions in antient authors. *Theognis*, v. 579, says, “I hate a profligate woman, and an impudent man, who ploughs the field of another;” and *Plautus*, speaking of an adulterer, says,

Fundum alienum arat, suum incultum deserit.

“He ploughs the field of another, but leaves his own untilld.” So Virgil, Georg. lib. iii.

... Nimio ne luxu obtusior usus

Sit genetali arvo, sulcosque oblinet inertes.

The version of the lxx. in the Complutensian edition, supports this opinion. It must, however, be acknowledged, that the word to *plough*, is not always taken in this metaphorical sense: witness the proverb, *Alienâ arare vitula*, to plough with the heifer of another; which is spoken of plagiarists, who employ in their own service, the labours, and means of success, which others had prepared for themselves: and this *may* be the sense of Samson's answer “if you had not employed the *confidence* of my wife,—what was my peculiar property,—if you had not violated my secrecy,—you had not explained my riddle;” which leaves the *personal* honour of this woman unpolluted, though it detracts from her prudence, and fidelity, which offence it should appear, was not forgiven by the indignant Samson till long after.

CHAPTER XV.

SAMSON'S JACKALLS, NOT FOXES.

THE animals caught and employed by Samson, have engaged our attention elsewhere; and we found reason to consider them rather as *jackalls*, than

than as genuine foxes. A principal reason for which, is the rarity of the fox in Judea, and the superabundance of jackalls throughout the East.

They go in troops; and are found throughout Palestine in great numbers, especially, says Belon, in the neighbourhood of Cesarea (Samson's country) where *two hundred* are often seen in a body roaming together. The Hebrew chieftain might, therefore, easily obtain any number.

There is some attention due to the nature and use of the *torches*, or *flambeaux*, or *lamps*, employed by Samson in this procedure; and, perhaps, could we identify the nature or form of these, the story might be relieved from some of its uncouthnesses. They are called *lapadim*, לַפְדִּים; or, rather *lampadim*, as the Chaldee and Syriac write it: whence the Greek *lampos*, and our *lamp*. Now, these *lamps*, or *burners*, were placed between two jackalls, whose tails were tied together, or at least there was a connection formed between them by a cord; this is the reading of the lxx. in the Complutensian, καὶ συνεδρυσεν κερκον πρὸς κερκον. Possibly, then, this cord was of a moderate length, and this burner being tied in the middle of it, it had somewhat of the effect which we have seen among ourselves, when wanton malice has tied to the tail, of a dog crackers, squibs, &c. which, being fired, have worried the poor animal to his den; where, supposing them still to burn, they might set all around them on fire. We know it is the nature of the jackall to roam about dwellings and out-houses; this would lead these animals to where the corn, &c. of the *Philistines* was stowed; which being inflamed, would communicate the conflagration in every direction. We must therefore, suppose,

1. That these *burners* were at some distance from the animals, so as not to burn *them*.
2. That they were of a nature to hold fire long, without being consumed.
3. That they were either *dim*, in the manner of their burning, and their light; or, perhaps, were even not to be *alarmingly* distinguished by their illumination. They might burn *dead*, as we say; so that their effect might take place too late to prevent the mischief which attended them.

This assimilates the circumstance of these *lamps* or *burners*, pretty much to the history of Gideon; who, we find, used three hundred of them in his expedition, as Samson used one hundred and fifty; so that they could not be rare or valuable, but common and ordinary articles. We have thought so much on the subject of these *burners* was proper for this place: for further remarks, consult the article and plate of EASTERN LIGHTS.

We ought also to know the actual state of the corn, said to be in *sheaves*, but, perhaps, properly,

brought into the garner, the threshing-floor, and there gathered into *heaps* ready for threshing: where it had acquired a great degree of dryness; and where, when it was once on fire, it could scarcely fail of being totally consumed. We are then, I presume, to understand the effects produced by these various companies of jackalls, as if one rambling party set fire to the standing corn; others to the gathered corn; others to the vines, others to the olives, &c.; so that, by reason of the great number employed, (300), a general devastation ensued of whatever was abroad, out of the towns or secured habitations. We shall only add a reference to Bochart, *Hieroz.* Part. I. lib. iii. cap. 13.; to Ovid. *Fast.* lib. iv.; Suidas, on the word *Neoria*; and Aristophanes, in *Acham*.

VERSES 15—19.

SAMSON'S DELIVERANCES.

Samson having found the jaw-bone of an ass, seized it, and with it slew a thousand men.

The Spirit of strength which had lately come upon Samson, and enabled him to burst the bands which had confined him, enabled him also to manifest prodigious exertion of another kind. We have formerly supposed that Samson did not dwell *alone* on the rock Etam; but he had some attendants, who would, on occasion, support their master.

From the construction of the words, it may be suspected that Samson wielding the jaw-bone, struck dead with it the *chief* of those who opposed him; and then the rout of the enemy became general: for, I do not find that it is absolutely necessary to say HE *slew*, i. e. killed,—though he certainly *defeated* (and might even maim many) a thousand men;—the word may signify that he *beat* them;—but, in a military acceptation, to *beat* is not strictly to destroy. Perhaps, as afterwards, on another occasion, when the Philistines saw that Goliath was dead, they fled; so now, when they saw their leader killed, they were panic-struck.

This idea arises from attributing to the word ALEPH, the sense of *chief*, which it appears to have not unfrequently. The construction of the passage would be, "He slew with it" (the jaw-bone) "a thousander,"—leader, or chief, [in modern language, Colonel], where the word for *slew* is (ך', יאכ); but when Samson himself composes his song of victory, he says:

With the jaw-bone of an ass—a heap—heaps; (*one heap—two heaps,*)

With the jaw-bone of an ass, have I beat a thousander—a chief: *aleph aish*.

Where, besides the similarity of sound in the original words, *be-lehi hechamor chamor chamorutim*, referring to "the ass, the heap, the heaps,"—we observe the word rendred to beat, is (הכיתי, HECITI,)

RECITI,) which signifies to *beat*, as an army is beaten,—or, to beat them to a mummy, as we say, with wounds,—or, to beat them to atoms: I am persuaded there is a play of words in these verses, of much the same nature as the play of words in Samson's famous riddle, which it is not easy to obtain in a version: there is even, as appears to me, an equivocation in them; and possibly the word AISH, in the sense of *chief*, is added, to explain the sense in which the word *aleph* is to be taken; as *aleph* signifies both a leader of a body of men—suppose a thousand,—and a thousand, as a leading number.

The difficulty of determining the meaning of the foregoing passage, seems to have attended the minds of translators, in their versions of the following history: Samson threw away the jaw-bone, after the service it had done him, and called the place “the throwing away of the jaw-bone,” *Ramoth-Lehi*: then, being thirsty, he prayed, and God clave an hollow place that was in *Lehi*—not the jaw-bone of the ass, *Lehi*, but the place named *Lehi*, in remembrance of the victory obtained by a jaw-bone. I would even query, whether the violence with which the jaw-bone was thrown away by Samson, did not make a breach, or open a crevice in the rock, and from this breach issued water; that part of the rock which before confined it being broken off: for I observe, Samson is said to beat—to beat to pieces his enemies—*cutat*; and a word of the same import, *cutash*, is the root of the word *macutash*—*mactesh*, rendered the *hollow* place—why not the *broken* place? which was in *Lehi*. If this be just, we see the reason of the name of the fountain, *Oin hakura asher belehi*, “the fountain of invocation in *Lehi*,” with the veracity of the remark, “it exists to this day;” which, if it had issued merely from the *alveole*, the hole of a tooth in the jaw-bone of the ass, is hardly within the compass of credibility; as the jaw itself must have perished in a few years at

farthest. Supposing, therefore, that this addition was made by Ezra, as many such observations were, it is demonstrative against the issuing of this fountain from the jaw-bone of the ass. *Macktesh* is the name of a place, Zephan. i. 11. *Josephus*, and the *Chaldee* corroborate this statement; the latter, indeed, supposes the very same facts. The lxx. (Vatican copy,) call this fountain a pit, *λακκον*. The Alexandrian copy, and the Complutensian, call it *Siagonos*; and *Josephus* says this place was afterwards called *Siagon*, “the jaw.” This is the sentiment also of Usher, *Annal. ad An.* 3578.

The wonderful strength of Samson is beyond the ordinary course of nature; a naturalist therefore may dismiss it from his remarks; yet, hinting a *query*, whether in the form, proportion, bulk, or figure of the hero, any thing of this power was apparent? Perhaps he was neither stouter, larger, nor firmer than other men; but was stronger, as enabled by the Divine Spirit; and so long as he preserved that token of obedience which had been appointed him, the peculiar appearance, &c. of his hair. Was this strength constantly resident in him, in the same superlative degree?—from the mention of the Spirit of the Lord *coming upon him*, I should think not: like other *inspirations*, it was occasionally present in exertion, and occasionally *quiescent*. May one virtue only be given by inspiration; as Samson was famous for *strength*, but not for wisdom, or continence? or, *must* we suppose, that the Spirit of the Lord coming on an individual, filled him with *every* grace and virtue at the same time, notwithstanding the failings of Samson?

CHAPTER XVII. VERSE 15, &c.

THE man Micah had a house of Gods—and Teraphim. What these *Teraphim* were, vide the remarks and plate on Gen. xxxi. 30.

R U T H.

THIS book of RUTH affords little peculiar for the attention of the naturalist, or philosopher; the famine, the expatriation of Naomi, the death of her family, her return with Ruth, and the connection of the latter with Boaz, by means of her gleanings, are circumstances of history, but not of science. The decorations counselled by Naomi,

and adopted by Ruth, are in conformity to what we read of elsewhere, and what is still customary in the same climate and country: the handkerchief which she wore on her head has been considered, in FRAGMENT, No. cxlv. p. 166. and may be seen in Plate I. No. 15. on Isaiah iii. 18.

AN

AN
EXPOSITORY INDEX

TO THE FIRST BOOK OF

SAMUEL,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER V. VERSES 6, &c.

THE disorder which afflicted the Philistines of Ashdod, and of Ekron, was at once painful and shameful, and both from the nature of its seat.

The Hebrew name of this disorder is *Apholim*, it is found in the catalogue of diseases with which Israel is threatened, Deut. xxviii. 27. The Masorites call this malady, *Techorim*; lxx. *ἰσχρας*, the fundament; Jerom, *Anos*; *secretiorem partem natium*; but these words rather express the seat than the nature of the disease. Josephus calls it the dysentery; Symmachus, a descent of the anus, or falling of the fundament: Aquila supposes it was a corroding ulcer;—perhaps it was, *a fistula in ano*. It appears from verse 9, that the seat of the complaint was *internal*; for the original implies, that their deep, or *interior places were diseased*: yet that this disease was noticeable externally, is clear, from the Psalmist's remark, lxx. 8. "he smote his adversaries in the hinder parts; he put them to open shame," or to perpetual infamy. Such kind of insults, being not the wounds received by the soldier, who bears his scars in front, but of a nature which only contempt can inflict: therefore, says the ludicrous Butler:

*A single kick in that place, more
Hurts honour than deep wounds before.*

This certainly was the idea of the Psalmist.

Those diseases of the anus which we call the *piles* or a *fistula*, may continue many years without endangering life; yet we read, verses 9, 11. that many Philistines died of this visitation. This circumstance leads to the conjecture, that the disease was either more than usually violent; or, that it was accompanied by other disorders of a fatal nature: perhaps, the state of the weather was inflammatory, and ought to be taken into the account; or, perhaps, an injudicious mode of treatment, augmented the effects of the disease itself. SCHEUZER thinks, they were somewhat of the nature of pestilential *buboes*; which, says he, "are of a critical nature for the patients, who, when these are small, seldom recover, but when they are large, though extremely painful, they are salutary to the sufferer. This observation, if I am not mis-

taken, gives light on what is said, verse 12, that those who did not die, were stricken internally. I therefore determine to call this scourge by the name of a plague."

The Arab writers assert that the Philistines had treated the ark with great indignity, and had even gone so far as to bury it under a *dunghill*: if by the term *dunghill* they might be understood to mean *human excrements*, [or a *jakes*] it should seem that they discover a relation between the offence and its punishment, which is lost on western commentators.

CHAPTER VI. VERSES 4, 5.

THE oblations sent as penitentiary offerings by the Philistines, consisted of representations, or figures of those things which had been the causes of their sufferings: they comprized.—1, the parts of the person which had been diseased: 2, the animals which had ravaged their country.

Whoever has seen the *ex votos*, formerly, and I suppose, still, sent to the churches in popish countries, as memorials of deliverances received by the parties who sent them, will be at no loss to determine the import of these images sent by the Philistines; and it must be confessed, that the sight of heads, eyes, hands, feet, &c. in modern churches, is not ill adapted to reconcile the mind to the conduct of these heathen, in sending representations of parts of the person which, however necessary they may be to the functions of life, are little formed for public exposure:—such is the general suffrage of civilized mankind. *Josephus* varies these five golden figures of parts of the body, to five *statues*: and, probably, they might be statues, whose attitude denoted the disease which afflicted them. The *mice* of this passage we have thought might be a kind of the Jerboa (Vide on Proverbs xxx. plate) as our *mouse* is not perhaps, mentioned in Scripture. It must, nevertheless, be acknowledged, that ancient authors notice the destructions occasioned by rats; and that in the East, they sometimes ravage whole countries: witness *Aristotle*, *Hist. An.* lib. vi. cap. 37.; *Pliny*, lib. viii. c. 29. who reports, that the inhabitants of the island of *Gyaros*, one of the Cyclades, were obliged to

to abandon their residence on account of the devastation occasioned by rats. He says the same of the inhabitants of the Troad, lib. x. cap. 65. *Justin*, xv. cap. 2. cites the Abderites; *Herodotus*, lib. ii. and *Josephus*, lib. x. cap. 1. mention the destruction of the army of Sennacherib, as being occasioned by rats. *Eliau*, lib. xii. c. 41. and *Diodorus*, lib. iii. instance in certain cities of Italy: and the Egyptians, according to *Horus Apollo*, lib. i. cap. 47. denoted desolation under the figure of a rat.

On the other hand it must be admitted that the rat was held in honour among some nations as a sagacious and provident animal. Hence he is equally with the Elephant,—“the half-reasoning Elephant”—the constant companion of Ganesa, the Hindoo god of wisdom and prudence. This established Indian symbol, with its connections, renders very credible the assertion of Philastrius that a sect of heretics worshipped the rat; and of Iamblichus, cited in Photius, that even the term *mystery*, or worship of the deities had reference to the rat; Ganesa being the first of the gods.

CHAPTER XII. VERSES 17, 18.

SAMUEL cried to the Lord, and the Lord sent thunder and rain—in the time of wheat harvest.

Among ourselves, and throughout the whole of the Northern temperate zone, thunder and rain are far from being uncommon during harvest: on the contrary, they are more frequent in the hot months of autumn, than at any other time of the year: but, in Palestine, and in the torrid zone, the seasons are more distinctly marked than among us; and, as the rainy season is a period of almost uninterrupted rain, so summer, or harvest, is a period of dry weather, without a shower, and almost without a cloud. This fact being well known to the assembled Israelites, not one among them could expect such an event as that which Samuel predicted. What St. Jerom remarks on Amos iv. merits attention here: “*I have also withheld the rain, when there remained three months to the harvest.*” The rain, says he, which they call of the latter season, is extremely necessary to the fields, and to the thirsty lands of Palestine; for without it, the corn would be dried up before the time of harvest. The period here mentioned, is the spring, at the end of April, when to the corn harvest is three months, May, June, July.—If this explanation should be insisted on, the thing is absolutely contrary to what happens regularly throughout the East; it is even impossible: *for never have we seen it rain in these provinces, and especially in Judea, at the close of the month of June, nor in the month of July:* and we read, that Samuel obtained by his prayers, as something astonishing and prodigious, a rain in summer, and in the wheat harvest:” which is usually from Midsummer, to the end of July.

“Let us admire and adore,” says SCHEUZER, “the good providence of the Supreme Being. If rain fell at intervals in the hot climates, as it does in the temperate, it would ruin the vegetables, which would never be able to resist the heat of a perpendicular sun: the same as we sometimes remark in Switzerland, that our vines are burned up, when rain is succeeded by clear weather, and a hot sun.”

CHAPTER XVI. VERSE 20.

“AND Jesse took an ass laden with bread.”

The words *laden with*, are an addition of our translators: the original is, *an ass bread*, or, *an ass of bread*, meaning, I incline to think, not an animal, but a vessel, containing bread; a stated measure, or, a *pile*; the lxx. render, γομορ ἄρτων, a *chomer* of bread: so we find in the Greek poet Sosibus, “he ate three times, in the space of a single day, three great asses of bread,” ἄρτων τρεῖς ὄνυες, which *Casaubon* (in *Lectio Theocrit.*) understands of the *lading* of three asses; whereas, it means the contents of three vases of the kind called an ass. [Vide FRAGMENT, No. ccxxx. p. 128.] This helps to account for the calumny, that the Jews worshipped *an ass* in the temple; i. e. the pot of manna was of that kind of vase called *an ass*; [or, the *piles*, if shew bread. Vide on 2 Kings vi. 25.]

VERSE 23.

The history of the disease of Saul, is transmitted in terms which require consideration, before their true import can be determined. We see on one hand, the effect of bodily infirmity, on the other hand, the text mentions the agency of an evil spirit; we see this bodily infirmity abated, and, as it abates, the evil spirit departs; the means used to effect this cure, are adapted to the state of Saul, as a patient, not to the state of the spirit understood to possess him: we are led, therefore, to enquire, 1st, whether this disease be itself the evil spirit? or, 2d, whether the evil spirit acted by means of this disease, so that as it increased or abated, the opportunity of the evil spirit to do mischief increased, or abated with it? or, 3d, whether the manner in which this event is related, was a mode of narration popular and unambiguous in its day, but now obsolete and difficult? I shall only observe, that there is no reason why the Jews, as a nation, should be denied national modes of speech, as all nations have not only customs and ideas, but phraseologies, expressions, and conceptions, peculiar to themselves: so peculiar, indeed, that neighbouring nations are hardly convinced of their propriety. But we may ask, what could be that mode of representing the import of subjects like the present, which the sect of Sadducees might adopt, seeing they professed to receive the Scriptures, while at the same time, they denied the agency of spirits? They must have had some plan of

of interpretation, which evaded the obvious, and literal meaning of such passages. This remark justifies the selection made by our Lord, of a passage where no such interpretation could be adopted by the Sadducees, Luke xx. 37.

The character of Saul, is that of a gloomy, apprehensive, melancholy man; very tall of figure; in person, perhaps, thin, and pale complexioned; under this temperament, he was liable to excessive dejection of mind: and after taking, without success, what remedies were customary, his servants, physicians, I suppose, (*Gen. i. 2.*) finding his case beyond the reach of their drugs, thought proper to represent it as a visitation from on high; yet to recommend the use of music, as a *recipe* whose effects might be favourable. The event justified their expectations: and the amusement, the delight, the sympathy, and the enjoyment of Saul, while his attention was engaged, produced an interval of disease, which gradually improved to convalescence. I do not consider Saul as a *maniac*, but as an *hypochondriac*, whose low spirits were relieved by the chearful, and animating vibrations of the young shepherd's *careless* harp: the sprightly effusions

Of linked sweetness long drawn out,
With wanton heed, and giddy cunning,
The melting voice through mazes running,
Untwisting all the chains that tie,
The hidden soul of harmony.

To repeat the histories current among the ancients, in which the power of music was effectual to raise the passions, or to soothe them; to rouse the mind to rage, or to calm it to complacency, would lead us too far. That they were great, we may allow, without adopting hyperboles—such as the cure of bites of serpents—of the fever—of the phrensy, and even of the plague.

The original use of music, probably was to compose the spirits, and to render the mind sedate, at the solemnities of religion, sacrifice, &c. afterwards, to soothe and tranquillize the imagination, and the fancy, for purposes of repose; and this appears still to be the character in which eastern music excels; where, not science, but expression prevails. How well adapted the unstudied strains of a shepherd swain, whose harp, at the same time, was bold, through the courage of its master, free through his “native wood-notes wild,” and sedate through his piety,—how well such a remedy was adapted to the cure of Saul, may be estimated by a moment's reflection. Vide 2 Kings iii. 15. for the tranquillizing effects of the harp in the instance of the prophet Elisha.

CHAPTER XVII. VERSES 4. 7.

THE GIANT GOLIATH.

THE height of this great champion of the Philistines is described as being *six cubits and a*

span: which, taking the cubit at *eighteen inches*, is *nine feet six inches*: if the cubit be taken larger, (*as 21 inches*) it may make his height *eleven feet*: but there is no necessity for this addition. From *nine feet six* to *nine feet nine inches*, is the best approved calculation. *Goliath*, then, was not such a monster as the world never saw: for we have accounts of others who could match him in height, in figure, and perhaps, in strength. Vide the article GIANTS, in CALMET.

The Arab writers mention, under the reign of Nouschirvan Cosroes, the appearance of a giant who was in height no less than *seven cubits*: consequently he exceeded this famous Goliath, who was only *six cubits and a span*.

The weight of his cuirass was 5000 shekels. The estimate of this weight depends on that of the shekel; it could hardly be less than 150 lbs. nor more than 200 lbs.

The weight of his spear-head was 600 shekels, which may be 16, or 24 lbs.

The Arabs say that there was a dynasty of kings among the Philistines all of which were named *Gialout* [Goliah] which reigned at the time when the Hebrews conquered the country. This is not unlikely, as the same idea is annexed to the title of *Cai* [great] among the Persians. *Cai-Cosroes*, the last of these, say the writers alluded to, was the Goliah slain by David. If we might depend on this, it would tend to support the proposition on 2 Sam. xxi. 20. that the “*sons of the giant*,” were not literally *sons of one person*; but they might be of *one race*; if not rather disciples of a public officer, the national champion.

VERSE 34.

David says he killed a lion and a bear: “I seized them *by the beard*; I smote them, and slew them.”

David here refers to two different events. We have no need to suppose that the lion and the bear were together, as a lion rarely hunts in company.

The *beard* by which David seized these animals, applies equally to the lion as to the bear. We find in Homer, “a well bearded lion;” and in Martial, Lib. x. Epig. 9.

Barbam vellere mortus leoni,

“to pluck the beard of a dead lion.” The word, however may be less strictly taken, from the *under-jaw*, or the *chin*: and was so understood by the Chaldee, and Jerom: lxx. *φαρυγγα*, the *gullet*. The lions of Judea were not of that terrific species which Africa furnishes: but that they were formidable, and even fatal to man, appears from several instances in Scripture. 1 Kings, xiii. 24. 2 Kings xvii. 25. Vide Samson, Judges xiv.

CHAPTER XX. VERSE 30.

SAUL's anger was kindled against Jonathan, and he said unto him—“*Thou son of the perverse rebellious*

rebellious woman. Mr. HERVEY is displeased with this rendering, and would correct it, to—*son of perverse rebellions.* That it will bear this sense, need not be doubted: but, the reflection on the mother of Jonathan by this passionate monarch, is just as gross, and is absolutely undeniable, at the close of his speech, as our translation represents it to be at the beginning of it. “Thou hast chosen the son of Jesse, to thine own confusion, and to the confusion of thy mother’s nakedness.” It should be remembered, that Saul was subject to a disease which weakened his mental powers; of which we need no stronger proof than that before us, his calling names. Notwithstanding, I believe, among ourselves, most men would rather be called “dog,”—than “son of a bitch;” which, in fact, though only equivalent, yet seems to be more offensive; because, it reflects on the mother of the party. I could not help extracting from MUNGO PARK, an instance of the prevalence of the same principles in Africa; and I think, that if we suppose king Saul, unable to vilify Jonathan to his own satisfaction, by personal reproaches, had outstepped the ordinary abuse of his day, and proceeded to that which was designed to produce uncouth vexation, we do little injury to his character, or that of his general deportment. “Maternal affection is every where conspicuous among them (the Africans,) and creates a correspondent return of tenderness in the child. “Strike me,” said my attendant, “but do not curse my mother.” The same sentiment I found universally to prevail, and observed in all parts of Africa, that *the greatest affront which could be offered to a negro, was to reflect on her who gave him birth.* Travels in Africa, page 264.

CHAPTER XXIV. VERSE 2.

SAUL sought David and his men to the very summit of the rocks of *the wild goats*; or, where only the wild goats can inhabit.

The word *Iaal*, or *Iol*, plural *Iolim*, feminine *Ioleth*, occurs also, Psalm civ. Job, xxxix. 1. and Prov. v. 19. Various have been the sentiments of interpreters on the creature designed by it. *Bochart* insists that it is the *Ibex* or *Rock-goat*. The root from whence the name is derived, signifies, *to ascend, to mount*; and the *Ibex* is famous for clambering, climbing, leaping, on the most craggy precipices, and on the very tops of the mountains.

The *Ibex* inhabits the high mountains; so says the Psalmist of the *Iolim*, Psalm, civ. 18. and Job. The Arab writers attribute to the *Iaal* very long horns, bending backward; consequently, it cannot be the *Chamois*; the horns of the *Iaal* are reckoned among the valuable articles of traffic, (Ezek. xxvii. 15.) says SCHEUZER. Elian says, lib. xiv.

cap. 16. that these horns were used as drinking vessels; and *Belon* says, that in Crete, bows are made of them. The rapidity and starts of the *Ibex*, are mentioned by *Pliny*, lib. viii. cap. 33. and others. *Johnston*, (Hist. Nat. Quad. page 53.) says, “it is certain there is no crag of the mountains so high, prominent, or steep, but this animal will mount it in a number of leaps, provided it be rough, and have protuberances large enough to receive its hoofs in leaping.” Buffon, tom. x. p. 281. after observing that the *Bouquetin*, or *Rock-goat*, greatly resembles the *Chamois*, observes, that the “*Rock-goat* being more nimble and strong, mounts to the very top (*s’élève jusqu’au sommet*) of the highest mountains: whereas the *Chamois* inhabits only the second region.” *Hasselquist* says, “the *Rock-goat* . . . is found in abundance in the mountains of Syria and Palestine.”

The leaps of this animal from rock to rock, are aptly descriptive of the leaps of David and his men from place to place;—not less was the corresponding eagerness, perseverance, and activity, which Saul manifested as a hunter of this agile clamberer.

We remark on the passage Proverbs, v. 19. that commentators have hardly seized the Poet’s meaning; he is contrasting the constancy and fidelity of a wife, against the inconstancy and infidelity of a mistress; and uses, first, the simile of the *Hind*, as expressing kindness in prosperity and in society; the attachment of the *Ibex* in spite of deserts and solitude, forms his second simile.

Drink waters out of thine own cistern.

Let thine own things be only thine own,
And not a stranger’s with thee.
Let thy fountain be blessed,
And rejoice with the wife of thy youth:
That *Hind* of loves!—that *Ibex* of constant affection!
Let her love-favours inebriate thee at all times;
Be thou always ravished with her love.

The Preceptor, I presume, means to compare, 1. the *Hind*, or female deer, accompanying her mate in the forest, on the plains, amidst verdure, amidst fertility; 2. the female *Ibex*, faithful to her associate on the mountain crags, amidst the difficulties, the dangers, the hardships of rocks and precipices, to the constancy of a wife, who in the most trying situations still encourages her partner, shares his toils, partakes his embarrassments, leaps with him, as it were, from crag to crag, and however he may be hunted by adversities, endeavours to moderate by her constancy, and to cheer by her blandishments, those hours of solitude and solicitude, which otherwise were dreary, comfortless, and hopeless. This seems to me to be the force of the (יח, *chen*) affectionate constancy of this passage; and to be an inference undeniable in favour of the adjoined remonstrance:

N

How

How far now, my son, canst thou be ravished
with a stranger woman?
And embrace the bosom of a stranger?

I think it likely that the foundation of this simile occurs in nature; but no author whom I have been able to consult has afforded information on this constancy of the female *Iber*.

For the History and Figures of the Rock-goat, or *Iber*, see among the Plates, on Job xxxix.

CHAPTER XXV. VERSE 18.

THE particulars of Abigail's present to David, are—loaves of bread; or, *two hundred of bread*; and two *nebeli*—jars—*earthen jars*, perhaps, of wine (for Samuel's mother carried a *nebel* of wine to Eli, 1 Sam. i. 24. which seems to have been an earthen jar, or jug,) *five sheep*; *five measures (sata) of roasted—or parched—corn*; (but *Bochart* thinks this was rather *chick peas*, a kind of tares, roasted; for this is of general use in the East, and part of a traveller's provision; in which character, it might be acceptable to David,) a hundred clusters of raisins—or, *a hundred dried clusters*; and *two hundred cakes*—more probably a fixed and determinate quantity—so much as was pressed together purposely in the drying—*of figs*. Compare this (especially the *five sheep*) with 2 Sam. xvii. 28, 29.

CHAPTER XXVI. VERSE 20.

“THE king of Israel is come out . . . to hunt a *partridge* on the mountains.” This passage should be compared with Jer. xvii. 11. “The *partridge* sitteth (on eggs) and produceth (or hatcheth) not, so he that getteth riches and not by right, shall leave them in the midst of his days, and at his end shall be contemptible.” The difficulty is, to ascertain in what sense the *partridge* justifies this similitude. It seems to be clear, that this bird *sitteth on eggs not its own*, to answer to the *getting of riches not by right*; from these eggs it is driven away, *leaves them in the midst of his days*, before the time for hatching is expired: the same bird which does this, is also hunted on the mountains. I must acknowledge myself hardly satisfied with the article in Parkhurst who observes, “that the *partridge* here mentioned, must be the *cock*. The *hen* cannot be meant, because both the verbs are *masculine*; neither can *לָבַד*, *masc.* signify *laying of eggs*. . . But why should it be said of the *partridge*, whether *cock* or *hen*, rather than of any other bird, that it *sitteth*, and *hatcheth* not? because the *partridge's* nest being made on the ground, the eggs are frequently broken by men, or other animals, and the bird is often obliged to quit them

for fear of cattle, dogs, or sportsmen, which chills the eggs and makes them unfruitful. Rain and moisture also may spoil them.” [On the use of the *masculine* verb, compare on 2 Sam. xvii. 8.]

As to the hunting of the *partridge*, which Dr. SHAW observes, is the greater, or red-leg'd kind, the Dr. says, “the Arabs have another, though a more laborious method of catching these birds: for observing they become languid and fatigued after they have been *hastily* put up *twice* or *thrice*, they immediately run in upon them, and knock them down with their *zerwaltys*, or bludgeons as we should call them.” Precisely in this manner Saul hunted David, coming *hastily* upon him, putting him up incessantly, in hopes that at length his strength, and resources would fail, and he would become an easy prey to his pursuer.

Bochart thought that the bird in the Prophet was of the snipe, or woodcock kind: that kind, however, haunts the marshes, not the mountains. I had thought of the *Tetrao*, or heath game; but observing that BUFFON makes a separate species of the *Bartavella*, or Greek *partridge*, I shall offer that as the proper bird meant in these passages.

“To the red *partridges*, and principally to the *Bartavella*, must be referred all that the ancients have related of the *partridge*. Aristotle must needs know the Greek *partridge* better than any other, since *this is the only kind in Greece, in the isles of the Mediterranean; and, according to all appearance, in that part of Asia conquered by Alexander*. . . *Belon* informs us, “that the *Bartavella* keeps ordinarily among rocks; but has the instinct to descend into the plain to make its nest, in order that the young may find at their birth a ready subsistence: lays from eight to sixteen eggs.” . . . “Is capable of connection with the common hen; and has also another analogy with the common hen, which is, *to sit upon (or hatch) the eggs of strangers for want of its own*. This remark is of long standing, since it occurs in the sacred books.” Vol. iv. p. 197. edit. in 12mo. Now, if, in the absence of the proper owner, this *Bartavella* *partridge* sits on the eggs of a stranger, when that stranger returns to her nest, and drives away the intruder, before she can hatch them, the *partridge* so expelled resembles a man in low circumstances, who has possessed himself for a time of the property of another, but is forced to relinquish his acquisition before he can render it profitable: which is the simile of the prophet; and agrees too with this place.

CHAPTER XXVIII.

THE PYTHONESS OF ENDOR.

THIS subject, by its singularity, is among those which have occasioned the most considerable opposition of opinions among the learned. Those who

who maintain that Samuel *himself* appeared on this occasion, have undoubtedly the *prima facie* evidence of the present Hebrew text in their favour: nevertheless, those who consider the transaction as a mere juggling trick, have many arguments which are extremely difficult to be answered.

Observe, 1st, that the woman says, "Saul had slain the *aubuth*, pythonesses; and the *jadioni*, knowing ones:" yet Saul directs his servants to find him *boluth Aub*, a mistress of *Aub*. This title, possibly, means a person of superior talents, mistress in her art. She lived, it seems, at *Oin-Dur*, "the fountain of the circle,"—magical circle, I suppose; that figure being constantly affected by these *soi disant* magicians.

Observe, 2nd, that Saul at his best estate, was *hypochondriac*, and nearly out of his wits; but, in his present distressed circumstances, the disease seems to have recurred upon him with peculiar rigour.

Obs. 3rd, That he was by head and shoulders, the tallest man in his kingdom, so that however he might change his dress, he could not effectually disguise his person: also, that he took with him two inferior men (*anushim*,) who would naturally treat him with considerable respect.

It is likely, that this mistress of *Aub*, had suspended her practices for some time, during Saul's prosecutions; but, being now requested to resume them, she would naturally expect a considerable present, and would shrewdly sift out of the attendants, who their principal was. Add to this the easy distance of Gilboa from Endor. These circumstances render every way credible the opinion, that this woman knew Saul, but reserved the discovery of her knowledge to the point of time most favourable to herself. If the woman only *suspected* before, she would naturally be convinced of the dignity of her guest, when he wished *the very Samuel*, the prophet, the magistrate of Israel, *to be brought up* from the regions of the dead. And here we ought to remark, the distinction made, Deut. xviii. 11. between the *pythonesses*, *mistresses of Aub*, and the *doresh al hemuthim*, seekers to the dead.

It is probable, this woman stipulated to be employed in the *former* capacity; but she might not expect to be called on to exercise the latter. However, being mistress of her art, she undertakes this also; but her previous enquiry whom she was to raise, gives her an opportunity of adjusting her operations, with the greatest effect in her power.

Observe, how she leads Saul to expect the *ascent* of Samuel, *i. e.* from the earth; which agrees with what the prophet Isaiah says of these gentry, they chatter, and *mutter out of the dust*: that being most convenient for their deceptions. Further, *the woman SEEING the Samuel*, [as the *keri*]: now, this word, *seeing*, does not always mean actual vision;

for we read, Exod. xxxii. 1. that "the people *saw* that Moses delayed to come down from the mount;"—whereas this was no subject of sight; *et al.*—in like manner, this woman affected to see Samuel; but Saul did not see Samuel, for he asks her (וַיִּשְׁאָל) hitherto—in so much—in so far as thou hast yet seen *what hast thou seen?* The spectre being supposed to be slowly rising out of the earth, and only his upper part visible. *The woman answered, I see (Aleim) a DIGNITARY rising from the earth*: Saul enquires, *what is his appearance?* she says, (*Aish*) *a chief, an old man, i. e.* an old chief, *rises, and he is clothed with a MOIL*:—this *moil* was "the upper, and outer, vest; that which clothed from the shoulders downwards, to the thighs, or knees." [Vide FRAGMENT, No. cexxx. p. 101.] This *moil* Saul had ample cause to remember; for this had rent in his hands, when he endeavoured to detain Samuel formerly, 1 Sam. xv. 27. Such a *moil*, also, was officially worn by dignitaries: as David in regal processsion, 1 Chron. xv. 27.; it should even seem to be appropriate to persons of rank, from 2 Sam. xiii. 18. "the king's daughters wore *such moilim*." The woman expressly says, he was *muffled up*—wrapped, *in this mantle*: so that she did not even affect to see his face; and thereby avoided to describe his countenance, or features. She merely says, his dress is like that of a man of consequence. Now, Samuel was a person so well known, that a child would have attributed to him the proper age, that at which he died, dignity of person, and dignity of dress, such as became the post he had occupied. And here we trace deception. Was this the real *spirit* of Samuel? wherefore was it so characteristically clad, in reference to stations he had occupied on earth? was it his body? no: for that was buried at a distance, and probably in decay: his dress of office, if buried with it, was equally distant; and equally, no doubt, in a state of decay.—But the woman describes him according to his public character and station. And Saul being informed, that this personage wore the *moil*, the dress of rank, is persuaded that it was Samuel. *And Saul knew* from this description, *that it was the true Samuel*; and yet he had not seen this spectre, nor had its features been described to him; nor had it risen out of the earth, beyond head and shoulders; and those were muffled closely in a mantle.

It appears clearly, that Saul was at some distance from the scene of this incantation; that he knew nothing but through the medium of the woman; and the woman cried with a *loud voice*, as well from the effect of her distance from Saul, as to make the greater impression on him.

There is nothing in this procedure beyond the reach of very moderate art; to have described Samuel otherwise than he is described, would have been folly; to have introduced him to Saul personally,

sonally, *might* have been more convincing, but no such thing takes place. Directly as Saul is persuaded that it is Samuel, *he stooped his face to the ground, and bowed himself*, so, that he did not attempt to see any personage, but prostrated himself on the ground; and along this ground came the voice to him, which maintained the conversation with him; "muttering out of the dust." On the whole, I do not see the necessity even of *ventriloquism* in this history: the time of night implies all the conveniencies of darkness; the distance of Saul from the actual scene of incantation, the imperfect description of the person of Samuel, the passing of the voice along the ground, all afford so many means of deception, that I think *ventriloquism* may be dispensed with. Nevertheless, as a naturalist, it is proper that I should notice this remarkable faculty, which is possessed by some persons. It has been (and is) publicly exhibited at London; and I know a gentleman, who, when at school, was one of many, who heard a performance of the kind exhibited, by express desire of the tutor, in order to guard his pupils against similar deceptions in subsequent stages of life. This operator had the power of making his voice seem to come from above, as well as from below, from any part, or corner of the room; but he always took care to lead, by a dextrous insinuation, the ears of his auditors, to suppose he was, where he wished them to believe they heard him at.

We select the following information from Chambers's Dictionary.

"We had a person formerly in London, a smith by profession, who had the faculty in such perfection, that he could make his voice appear, now, as if it came out of the cellar, and the next minute, as if in an upper room; and nobody present could perceive that he spoke at all. Accordingly, he has frequently called a person, first up, then down stairs; then out of doors, then this way, then that; and all this without stirring from his seat, or appearing to speak at all.

"We cannot forbear making a few extracts on this subject from a work, published in 1772, entitled, *Le Ventriloque, &c. or the Ventriloquist*, by M. de la Chapelle, censor royal at Paris, member of the academies, at Lyons and Rouen, and F.R.S. Some faint traces of the art or faculty of *ventriloquism* are to be found in the writings of the ancients; but many more are to be discovered there, if we adopt this author's opinion, that the responses of many of the ancient oracles were actually delivered by persons possessing this quality, so very capable of being applied to the purposes of priestcraft and delusion. The abbé de la Chapelle having heard many surprising circumstances related concerning one M. St. Gille, a grocer at St. Germain-en-Laye, near Paris, whose power as a *ventriloquist* had given occasion to many singular and

diverting scenes, formed the resolution of seeing him. Being seated with him on the opposite side of a fire in a parlour on the ground-floor, and very attentively observing him, the abbé, after half an hour's conversation with M. St. Gille, heard himself called, on a sudden, by his name and title, in a voice that seemed to come from the roof of a house at a distance; and whilst he was pointing to the house from which the voice had appeared to proceed, he was yet more surprised by hearing the words "it was not from that quarter," apparently in the same kind of voice as before, but which now seemed to issue from under the earth, at one of the corners of the room. In short, this factitious voice played, as it were, every where about him, and seemed to proceed from any quarter, or distance, from which the operator chose to transmit it to him. To the Abbé, though conscious that the voice proceeded from the mouth of M. St. Gille, he appeared absolutely mute, while he was exercising this talent; nor could any change in his countenance be discovered. He observed, however, that M. St. Gille presented only the profile of his face to him, while he was speaking as a *ventriloquist*.

"The abbé de la Chapelle takes occasion to account for all the circumstances attending Saul's conference with the WITCH of Endor, and endeavours to shew that the speech, supposed to be addressed to Saul by the ghost of Samuel, actually proceeded from the mouth of the reputed sorceress, whom he supposes to have been a capital *ventriloquist*.

"He afterwards brings many instances to prove, that the ancient oracles principally supported their credit, and derived their influence, from the exercise of this particular art. Many other learned men have given the same account of the witch of Endor.

"The art, according to this author, does not depend on a particular structure or organization of these parts, peculiar to a few individuals, and very rarely occurring, but may be acquired by almost any ardently desirous of attaining it, and determined to persevere in repeated trials. The judgment we form concerning the situation and distance of bodies, by means of the senses mutually assisting and correcting each other, seems to be entirely founded on experience, (see Reid's Inquiry into the Human Mind, p. 70, edit. 2.); and we pass from the sign to the thing signified by it immediately, or at least, without any intermediate steps perceptible to ourselves. Hence it follows, that if a man, though in the same room with another, can, by any peculiar modification of the organs of speech, produce a sound, which in faintness, tone, body, and every other sensible quality, perfectly resembles a sound delivered from the roof of an opposite house, the ear will naturally, without ex-
the

amination, refer it to that situation and distance; the sound which the person hears being only a sign, which from infancy he has been accustomed, by experience, to associate with the idea of a person speaking from a house top. A deception of this kind is practised with success on the organ and other musical instruments; and there are many similar optical deceptions." So far from Chambers.

The art of *ventriloquism*, was well known in antiquity. *Josephus* calls this woman of Endor, expressly, *Engastrimytha, ventriloquist, a speaker from the belly, who made a trade of evocating the souls of the dead, and foretelling future events by their means.* Ant. lib. vi. cap. 15.

It is remarkable, that Saul receives NO real information from this supposed Samuel: for, that David was to receive the kingdom, was publicly known—that the Philistines would overcome Israel [David was absent], was extremely probable—that before long (for the word rendered *to-morrow*, does not necessarily signify the *next day*.) Saul and his sons should enter the state of the dead was certain, according to the course of nature, to a man at seventy years of age.

Thus, at the best, the predictions consist of generalities; of superficial observations, requiring no precise foreknowledge of future events, and communicating no exact intelligence. Saul solicits Samuel to inform him "*what he should do?*"—but the supposed Samuel gives him no advice whatever; neither religious, civil, nor military. Had the real Samuel been thus addressed, he would surely have intermingled *admonitions* with his discourse; and Saul would have been advised to repentance and to reformation, with whatever else the duty of the time required.

Further—Observe the fallacies of this supposed information: *the Lord shall give Israel*—the whole nation of Israel, WITH THEE into the hand (as captives, as subjects) of the Philistines; whereas, Saul was succeeded in part of the government, by his son *Ishbosheth*, and by David in the other part; nor did he, himself, fall into the hands of the Philistines as a captive, but avoided captivity by preferring death. If we take the word rendered *to-morrow*, strictly, it is false that the sons of Saul were the next day in the state of the dead. *Ishbosheth* and *Armoni*, sons of Saul, remained; and also *Mephibosheth*, his grandson, long after: and moreover, notwithstanding the especially (□1) of the predictor, that the *host of Israel should be delivered into the hands of the Philistines*, many escaped. It is proper to notice these falsities, because, they concur in proving that the *mistress of Aub* could not correctly see into futurity; but her inferences and guesses were fallible, as well as her practices were fraudulent.

That it was anciently a popular opinion that the souls of the dead could be *evocated*, and called into an appearance sensible to the eye of a spec-

tator, admits of no doubt. But Saul in desiring Samuel to be called up, certainly considered him, as the magistrate and *prophet* of Israel: no ordinary ghost; but one who while living possessed together with official authority, extensive predictive powers. He must have thought, also, that Samuel in the state of the dead had laid aside that resentment of his former conduct, which had entirely suspended all intercourse between them, inasmuch that Samuel did not visit Saul, though his sovereign, to his dying day. That a man who would not speak to another while alive, should afford him supernatural instruction after his death, is contrary to all supposable principle, to every representation we have among the antients, whether historical or poetical. Enemies and rivals (though ghosts) turn away in sullen silence, from those who would address them in the realm of hades: those only speak who had been friends.

If such were the opinion current in the days of Saul, and among the Jews who had adopted this heathenish superstition, it would greatly facilitate the part to be played by the witch of Endor. She would have thought a favourable, kind, happy prediction, to be altogether misplaced. When therefore she heard Saul acknowledge himself forsaken by God,—and state, without reserve, the refusal of God to answer him,—she perceived that his case was desperate; and that it would be contrary to the well known character of Samuel to foretel good,—prosperity, under such circumstances to the king of Israel. Having gradually brought Saul to a disclosure of his awful situation, from his own mouth, the answer to be returned was little short of being imposed by the necessity of the case. On the whole, then, it should appear that even if *Ventriloquism*, with its deceptions, though irresistible, be supposed not to have been exercised on this occasion, the delusion might nevertheless have proceeded; but certainly with the aid of that faculty nothing passed between this *mistress of Ob* and her royal enquirer that cannot easily be accounted for on natural principles, and without the intervention of the departed spirit of the prophet Samuel.

That this woman was no ordinary witch, but a person of consequence, appears from her having "a fat calf in her house," and her making good cheer, to revive her guest, after the effect her incantations had had on him. Now, such a person was, no doubt, well informed on public matters; and it is by no means impossible, that she had intelligence from the officers in Saul's army, of a disposition among the people, which led her to estimate their loyalty to their present king, at much less than their expectations from another. The event proved, that though Saul and his family did their duty as brave soldiers and officers, yet, that the host of Israel preferred safety by flight, to honourable death in the ranks.

AN
EXPOSITORY INDEX

TO THE SECOND BOOK OF

SAMUEL,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER V. VERSES 6, 7, 8.

THIS is a very difficult passage; and in order to understand it, we must premise certain circumstances. *First*, That here had been, from time immemorial, a sacred precinct, even from the days of (*Shem*) *Melchizedeck*, who resided here; and whose residence here was understood to have imparted peculiar sanctity and dignity to the spot. *Secondly*, That since the days of *Melchizedeck*, a temple [or, *fanum*,] had been built, no doubt, on the spot where that patriarch had offered sacrifice. These ideas we must retain, in considering the answer of the Jebusite to David. *And the king and his men*, his customary guards, *went to Jerusalem, to the Jebusite the inhabitant* of that district *of the land* [who was, perhaps, both priest and governor] *and he said to David, thou shalt not come in here*, to make it thy residence, *unless thou take away—discharge—dismiss—whatever is* offensive to the dignity of so holy a place, of a temple like this: no sick soldiers can be allowed, not *the blind persons*, nor *the lame persons*, of thine attendants: we stipulate expressly, that thou keep this district sacred.

Now, as he well knew David would not comply with these conditions, this was *saying*, in effect, *David shall not come here at all. But David took the fortified post of Zion*, which was on the hill adjacent: *and THAT became the city of David*, instead of Jerusalem, which he at first designed. *And David said, in that very day*, when he determined to render Zion his royal seat, *every degradation shall attend the Jebusite; and he shall labour in the drain of my royal building: even his blind men, and lame men*, for all his people are but blind and lame, *who hold David's person in aversion*, and have refused his intended royal favour: *accordingly, as they say, the blind man, the lame man shall not enter into THE house*, meaning their sacred temple, so I say, they shall not enter my house, my royal palace, with honour; but shall serve in the impure parts, the discharge of what is offensive in it. *So David dwelt in the fort, and called it the city of David, &c.* It seems, then, that David was so offended with the refusal of the Jebusite, who considered him (for possibly he had been himself wounded in some encounter with his enemies) and his men as not good enough—too impure to inhabit their city—which city, David

probably knew was appointed to be the metropolis of Judea; that he employed these haughty persons in the lowest offices of his palace, now become their rival, if not their superior. That *house* means *temple*, vide 2 Sam. vii. 6.; 1 Kings, vi. 22.; 2 Kings, x. 21. xii. 12. xxiii. 27. *et al.*

The reader will observe the *counterpart*, or *parallelism* of the sentence and sentiments, as maintained in this version.

This view of the passage, I believe, is entirely new: the difficulty of rendering it, which is allowed by all translators, must apologize for the attempt, to direct its meaning into this channel.

But we may perhaps obtain a more correct view of this history by preserving a distinction between the *city* and the sacred place. It is true that Joab afterwards took the *city*, or district allotted to the inhabitants around the holy spot; (1 Chron. xi. 6.) Now, it is every way likely that these *citizens* conceiving their city to be too holy, too sacred to become the residence of David and his guards, &c. the attendants on royalty, sent him the refusal recorded in the text under consideration. In short, they supposed that the sanctitude of the holy place extended to the utmost bounds of their city and properties. This was punished by their degradation, when conquered, to the most menial offices. The *city*, then, became subject to the civil authority of David, as king of Israel; but the property of the holy place continued in the family of the antient kings of Jebus; and this *sacred property* David afterwards *bought*, when he made a point of "not offering to the Lord what had cost him nothing," 2 Sam. xxiv. 24. In that passage we find Araunah acknowledging David, as "my lord the king,"—while he himself is also acknowledged to be *king*, i. e. of royal descent, from the antient Jebusite sovereigns, and therefore competent to sell the estate, verse 23. All the seoffered "Araunah the king, to the king"—David. Now if David had on the occasion in the passage before us, acquired this ground by force of arms, he would have been guilty of tyranny by invading the property of another: he would also have profaned this hallowed spot, by the blood shed in the contest: it would have been *desecrated* by that pollution. He therefore relinquished his design, turned aside and took Mount Zion; nor did he obtain the antient site of the altar of *Melchizedeck*, till a very striking and singular interference of Providence rendered

rendered the legal possessor willing to sell—for the purpose of perpetuating the sanctity of the place, by the erection of a sumptuous Temple upon it.

VERSES 23, 24.

When thou hearest the sound of a going in the tops of the mulberry-trees. The mulberry-tree is well known among us. Pliny calls it "the wisest of trees; because it is the last of domestic trees which shoots out its buds, and does not display its flowers, till the cold weather be entirely over." But there are doubts whether the mulberry-tree was known in Syria, so early as the days of David; and the word *Baka*, *Becaim*, has been taken rather to signify moist valleys, than trees. In 1 Chron. xiv. 15. the lxx. render it *αμύρις*, *pear-trees*; as Aquila does, in the place before us; and the Vulgate, both here, and in Chronicles. But, what is meant by the voice, or sound of going in the head of these trees? If these trees were near to David, why in their tops, or head? If they were distant from him, how could he distinguish the place of this sound? These objections are proposed by those who observe, that he might distinguish a sound from the head, or further part of a valley; and, that it is perfectly analogous to the mode of eastern warfare, to creep along any concealment, ravine, or hollow-way, in order to attack the enemy at unawares.

Is there any allusion in this sound of going, to a breeze of wind? Perhaps, the morning breeze, which, by shaking the tops of the trees, might produce a sound. In which case, the direction would be equivalent to "when the breeze blows stiffly, then attack the enemy." The usual idea, is that of thunder; but this implies a distance; for thunder near at hand must needs seem to come from above, from the tops of trees, not from their roots. Nevertheless, thunder at the head of distant moist valleys is not unlikely; but then this dismisses the mulberry-trees.

CHAPTER VI. VERSE 5.

"AND David, and all the house of Israel, played before the Lord, on all manner of woods of *Brushim*." It is clear, that this passage refers to musical instruments;—and probably, this word denotes that kind of wood which is most proper to form musical instruments;—it is generally rendered *fir* wood; and this may be its meaning: but the word being plural, seems to include more. I doubt even, whether it does not mean an instrument of music, for such seems to be the connection—*playing before the Lord upon all woods, on* [2] *rushim, and on cinnoruth*, &c. where the connecting and, seems to have some force. Otherwise, the instruments are, 1. *Cinnoruth*, harps. 2. *Nebalim*, another kind of harp, rendered in our version *psaltery*. 3. *Tophim*, timbrels, or *tympani*, the modern *diff* of the East. 4. *Menonoim*, cor-

nets. [I suspect we want information on this instrument]. *Tjeltjelim*, cymbals; but some think this was the *Sistrum*, an Egyptian instrument formed of wires.

As figures of these instruments are given in CALMET'S Dictionary of the Bible, we shall not enlarge on them here.

It is worth observing, on this word *berosh*, how contradictorily the lxx. have rendered it,—for want of established principles of natural history. In this place, they put *cypress*: in Isaiah, xxxvii. 24. lv. 13. lx. 13. *pitun*. Ezek. xxxi. 8. Zach. xi. 2. *peuken*. 1 Kings, v. 8. 10. ix. 11. vi. 15. *elaten*, (fir.) Isaiah, xli. 19. *myrtle*. Hosea, xii. 9. 2 Chron. ii. 18. *juniper*. The Vulgate, in fourteen places, read *fir*; in our text, *fabrefacta*; 2 Chron. ii. 8. *arcenthina*. Nahum, ii. 4. *agitatores*.

The Chaldee reads *fir* constantly; and most interpreters follow him: it is likely this writer should be quite as well acquainted with this subject, as any foreign translator.

CHAPTER XII. VERSE 30.

AND David took their king's crown from off his head; the weight thereof was a talent of gold, with the precious stones; and it was set on David's head. The great weight of his crown, renders it impossible to have been worn by any king in the world: what it was, what was the precious stone, (not stones, plural) and what was set on David's head, see, conjectured, in CALMET'S Dictionary of the Bible, FRAGMENT, No. cclxxxii. p. 184. The talent of gold weighed 114lbs.

CHAPTER XIV. VERSE 26.

THE weight of Absalom's hair, says SCHEUZER, is one of the most difficult passages of Scripture. This difficulty is by no means lessened in our translation, which renders, *and when he polled his head*, (for at EVERY YEAR'S END he polled it) *he weighed the hair of his head at two hundred shekels, after the king's weight*. Here we should consider, that the original does not say *at every year's end*, but, *at the end of days*, to the time he polled it, meaning, after a period of time:—and if we examine the scope of the story, we shall see, I apprehend, the reason of putting this remark in this place. Suppose Absalom had brought himself under a vow, to let his hair grow, at the time when his sister *Tamar* was injured. This would make nearly *six years'* growth: nay, if he had let it grow only after he had killed *Amnon*, it would be three years;—and it should seem, that he polled it on his return to Jerusalem again: for such probably is the connection of the passage, verse 23. *Joab brought Absalom to Jerusalem—Absalom returned to his house—Absalom polled his hair*. Having therefore worn his hair, apparently neglected,

lected, as a kind of mourning during his absence; on his return, he resumed his apparent affection for it, and care of it. To complete this solution, we may add, that not the absolute *weight*, but the *value*, is meant by the 200 shekels.

The *value* of his hair, arising from its beauty, was 200 royal shekels. This hair seems to be mentioned as an instance of personal *beauty*, not personal *strength* to produce, or to bear, such a quantity of hair; now, the colour of it, or the fineness of it, might add much to its value, though not to its *weight*. Moreover, against the usual idea that the *weight* of his hair was 200 shekels, we ought to recollect, that it was not his whole head of hair, but the *pollings*, or quantity taken from his head, that he thus estimated. For other instances, wherein *value*, not *weight*, is designed by similar estimation, vide FRAGMENT, No. cl. p. 114.

CHAPTER XVII. VERSE 8.

THY father and his men, are chafed in their minds, as a bear bereaved of her whelps. It is something singular, that the bear is generally *masculine* in the Hebrew: for instance, this passage does not refer, in the original, to a *female* bear, but to a *male*: and might be rendered, *like a (male) bear bereaved*, i. e. of his mate. The same may be said of the passages where a similar comparison is mentioned. Prov. xvii. 12, "Let a man meet a bear bereaved, rather than a fool in his folly." Hosea, xiii. 8. "I will come upon them as a bear bereaved." The reader will choose between the affection of a *she*-bear for her young, and that of a *he*-bear for his female. "The she-bear is intensely fond of her young, and is dreadfully furious when deprived of them; in fact, she ventures her life to avenge her loss:" on the other hand, "the male is extremely formidable in the season of accompanying the female, which, perhaps, is owing to jealousy," Brookes's Nat. Hist. Vol. I. Now, this disposition must be proportionately increased, if, during this season, he should be deprived of his partner. The passage where we read, that two *she*-bears, tare forty-two children, though it leads to the notion of their being females more strongly than any other passage, yet is in the *masculine*. I would therefore *query*, whether there might not be an anomaly of language in the Hebrew, as among ourselves, who, at first mention, usually call a cat —*she*, though it may prove to be a *male*,—as we call an animal of the canine kind, a *dog*, though it be really a *bitch*; nor do we always discriminate between a *duck*, and a *drake*, but say a number of *ducks*; or a *goose*, and a *gander*, but say a number of *geese*: whereby we include both sexes, under the name of one: so a *mare* is a *horse*, though a *horse* is not a *mare*; and certain naturalists, reckon the *bull*, under the *cow* kind; as they reckon the hind a (*female*) stag. I suppose, the current

idiom of all languages has somewhat of this imperfection: so that we may still continue to reckon the bears of these passages as *females*, if the construction require it, though the words be really *masculine*. See on 1 Sam. xxvi. 20.

VERSE 28.

"David being come to Mahanaim, Shobi, Machir, and Barzillai, brought, 1, beds, *mesheceb*: and 2, basons, *sephut*; and 3, earthen vessels, *cali iutjer*; and 4, wheat, *chittim*; and 5, barley, *shoarim*; and 6, flour, *kemach*; and 7, parched corn, *kali*; and 8, beans, *pel*; and 9, lentiles, *odeshim*; and 10, parched pulse, *kali*; and 11, honey, *dabash*; and 12, butter, *chemah*; and 13, sheep, *tjon*; and 14, cheese of kine, *shephut bekar*."

1. BEDS. This is a word of large signification, and denotes whatever is *laid down* in: whether these beds were of the litter kind, or somewhat like our settees.

2. BASONS, *sephut*. I suppose there was sufficient distinction between the *sephut* of this passage, and the *sephel* of Judges, v. 25. [Vide on Judges, vi. 19.] but, that each is a deep, capacious, *bowl*, implying *concavity*, is unquestionable: it is probable, however, that the "lordly dish" of Jael was of metal, and handsomely embossed; while the *basons* of the present article were merely *wooden bowls*, such as the Arabs still use for kneading their bread in, and afterwards eating out of. This is only conjecture.

3. EARTHEN VESSELS, *cali iutjer*. We have elsewhere [Vide Supplement to CALMET, articles SIN, SINNER] considered *cali*, as denoting a beautiful vase, a vase embossed, embellished, and painted; whether we ought to attach this meaning to it here, depends on the connection of it with the foregoing articles, and what we may suppose to have been their application. The *beds* could not be for the whole army—beds for some thousands of soldiers! they could only be for the king, and his retinue; the basons, if of the nature we have hinted at, magnificent and capacious, were for the royal service, not for the host at large: if so, these *cali*, vases, were of the nature of our *china*, not coarse earthen-ware; they also were for the king's use; and consequently *cali* may here, as well as in Eccl. ix. 18. signify a *beautiful*, no less than an useful, vase,—a vase, carefully finished by the hands of the potter: the words might be rendered, literally, *vases of form*, or *of the former*. The reference of this, to the antiquity of ornamental *china*, and to the practice of such an art, perhaps, not confined to one country, cannot escape the reader's notice.

4. WHEAT, *chittim*. This word is plural here, signifying several sorts of wheat: which has led SCHEUZER to say, "it comprehended antiently all sorts of *beaten* corn, cleansed from impurities."

I rather doubt this, however, because *barley*, which is a kind of corn, follows directly after. It

is probable, that the ancients attributed to wheat, a delicacy, a delicate fatness, which may account for the mention of it, in a manner not usual, Deut. xxxii. 14. "Butter of kine, milk of sheep, fat of lambs, rams, goats, kidney-fat of wheat, pure wine;"—or, if we read with Dr. GEDDES, "kidney-fat and wheat," it is evident, that not merely delicacy, but delicate plumpness, or fatness, is the general character of the subjects particularized; and that wheat is understood to be so far of the same character, as to be properly associated with them.

5. BARLEY, *shoarim*: the hairy grain.

6. FLOUR, *kemach*, i. e. corn reduced to powder by grinding.

7. PARCHED corn, *kali*. This word, *kali*, occurs again below, and is rendered by our translators, *parched pulse*. That there was a distinction between the subjects *parched*; or, in the manner of parching, is very likely. The reader will find, on Math. xxiv. 41. two ways of parching corn, described by Mr. PENNANT, who informs us, that it is an expeditious mode of preparing corn for food: perhaps, this recommended it, on the present occasion. Parched corn, however, is a kind of food still retained in the East, for so Hasselquist informs us. "On the road from Acre to Seide, we saw a herdsman eating his dinner, consisting of half-ripe ears of wheat, which he roasted, and ate with as good an appetite as a Turk does his pillau. In Egypt such food is much eaten by the poor, being the ears of maize, or Turkish wheat, and of their *durra*, which is a kind of millet. When this food was first invented, art was in a simple state; yet the custom is still continued in some nations, where the inhabitants have not even at this time learned to pamper nature."

8. BEANS, *pul*. Dr. SHAW says, "beans, after they are boiled and stewed with oil and garlick, are the principal food of persons of all distinctions."

9. LENTILES, *odeshim*. The lentile is reckoned among pulse; and is, indeed, a kind of bean. We find Esau longing for a mess of pottage made of lentiles, Gen. xxv. 34. Augustin, in Psalm xlv. says, "lentiles are used as food in Egypt, for this plant grows abundantly in that country; which is what renders the lentiles of Alexandria so valuable, they that are brought from thence to us, as if none were grown among us." Lentiles, however, were little esteemed by the Romans, who ranked them below that species of grain, from which they made a kind of beer, the *alica*.

Accipe Niliacum Pelusia munera lentem;

Vilior est Alica, carior illa Faba.

But in Barbary, Dr. SHAW says, "lentils are dressed in the same manner as beans, dissolving easily into a mass, and making a pottage of a chocolate colour. This we find was the red pottage

which Esau, from thence called Edom, (אֶדוֹם, *red*, Gen. xxxv. 30.) exchanged for his birth-right.

10. PARCHED pulse, *kali*. The repetition of this word here, after food of the pulse kind, seems strongly to support the propriety of our public version: the first *kali* placed after the corn, wheat, barley, flour—*kali*, may mean an additional quantity of the proper kinds of these, *parched*; so here being placed after the pulse, it may imply an additional quantity of the proper kinds of pulse, *parched* also, i. e. some ready for instant eating, others in store.

The Vulgate renders this *kali*, *frixum cicer*; now Dr. SHAW informs us, that the *cicer*, *garvanços*, or *chick pea* (which is a kind of tare,) are in the greatest repute after they are PARCHED in pans, or ovens, then receiving the name of *leblebby*. This seems to be of the greatest antiquity, for Plautus speaks of it as a thing very common in his time:

Tam frictum ego illum reddam, quam frictum est cicer.

BACCH. Act. iv. Scene 5.

And Horace mentions the *frictum cicer*, as a kind of food used by the poorer Romans:

Si quid fricti ciceris probat, & nucis emptor.

Art. Poet. 249.

The like observation we meet with in Aristophanes, speaking of a country clown, who was *αὐθρακίζων τρεβίδες*, parching of cicers.

The *leblebby* of these times may probably be the *kali*, parched pulse, of Holy Scriptures. It is at least certain, that this food is purchased by travellers to form a part, and a considerable part too, of the stock of provision, which they take with them on their journey. It is sold in almost every street of the principal cities.

11. HONEY, *debash*.

12. Butter, *chemah*. Butter is the unctuous part of milk, collected together apart from the whey. This is effected in the East, by shaking the milk in a skin-bottle, and pressing it. Hasselquist says, "they made butter in a leather bag (hung on three poles erected for the purpose, united at top in the form of a cone,) by swinging it to and fro by strength of arm." The heat of the climate in the East, does not suffer their butter to become solid like ours, but it is eaten quickly after it is made.

13. SHEEP, *tjon*. That the import of this word is *sheep*, in general, is admitted; but, in this passage, it seems rather extraordinary that *sheep* should be the only living animal mentioned, and that between butter (of kine) and cheese (of kine also).—Is it not rather likely, that some kind of food, prepared from the sheep, is the article here intended? for instance, *cheese* made of sheep's milk, for so Dr. SHAW informs us, p. 241. folio edit. "the sheep and the goats contribute also to the dairies

dairies of this country, it being **CHIEFLY** of *their milk* that the *Moors* and *Arabs* make **CHEESE**. Instead of runnet, they make use (in the summer season, particularly) of the flowers of the great headed thistle, or wild artich oak, to turn the milk; putting the curds, thus made, in small baskets of rushes, or *palmetta*, and binding them afterwards and pressing them. I have rarely seen any of these cheeses above two or three pounds weight, being usually of the shape and size of a penny loaf; such, perhaps, as we may suppose those ten to have been which *David* carried with other provisions to the camp of *Saul*, 1 Sam. xvii. 18. They have no other method of making *butter* than by putting their milk or cream into a goat's skin, which being suspended from one side of the tent to the other, and pressed to and fro in one uniform direction, quickly occasioneth that separation which is required of the unctuous and wheyey parts." Compare *Prov.* xxx. 33. Now, if we accept the idea of *sheep* cheese, for that of this word in our text, we see the reason why the distinctive description, cheese of *kine*, is attached to the following word; at the same time, we maintain the uniformity of subjects in the passage:—"butter (of *kine*), cheese of *sheep*, cheese of *kine*." Vide on 1 Sam. xxv. 18.

14. **CHEESE OF KINE**, *shephut bekar*. We have just seen Dr. SHAW's notion of the *cheeses* sent by *David*; which we ought to observe, are described in the original by another word (חרצ'י חבלב, *chrutji hecheleb*) signifying strictly, "*cuttings off of milk*;" or rather, "*separations of milk*," *lumps of coagulated milk*; the soft, tender, curd, curd recently set. I suppose, after what we have seen in Dr. SHAW, we may consider the *new cheese*, or *Bath cheese*, of our own markets, as the nearest approach to them, in substance, though not in shape. Now, if the cheeses sent by *David* were thus *soft* and *tender*, we may possibly see the reason why cheese made for keeping is described by another word in this passage: and if we consider the former word, as denoting cheese made of *sheep's* milk, which is *hard* and *durable*, it coincides with the notion, that this *shephut* was *hard* and *durable*, also: perhaps our *Cheshire* cheeses may be compared to it, in general properties, while in shape it might be, as the root of the word imports, round like an eminence, or *mountain-like*; which is no bad description of some of our *Cheshire* cheeses. The historian expressly observes, that this cheese was of *kine*; this remark coincides with the notion that there was another kind of cheese, which was *not* of *kine*; if so, it can only be the article intended by the foregoing word. That cheese of *kine* was somewhat of a rarity, we may infer from the little quantity of milk afforded by *kine* in hot countries: so Dr. SHAW informs us—"Notwithstanding the rich herbage of this country from December to July, the butter hath

never the substance, or richness of taste, with what our English dairies afford us in the depth of winter. *Abdy Bashaw*, Dey of *Algiers*, was no less surprised than his ministers, when Admiral *Cavendish*, a few years ago acquainted him that he had a *Hampshire* cow on board the *Cambridge* (then in the road of *Algiers*), which gave a gallon of milk a day, a quantity equal to what half a dozen of the best *Barbary* cows would yield in the same time. The *Barbary* cattle likewise have another imperfection, that they always lose their calves and their milk together." [Compare *Isaiah*, vii. 15.]

CHAPTER XVIII. VERSES 6, 8.

THE battle was in the **WOOD** of *Ephraim*. . . .
The **WOOD** devoured more people than the sword.

On *Joshua*, ii. 6. we observed, that the *Egyptians* and *Hebrews* called *woody plants*, those which were of a strongish stem, like hemp, or flax; and here, I presume to think, they called *woods*, or *woody places*, such districts of country as abounded in plants of similar description. We are so used to consider tall and substantial trees, as necessary to compose a wood, that we know not how to include in that description the marsh plants, and those of lesser stem. Nevertheless, this battle was fought in a *marshy* district; where, after the first shock between the two armies, those who were repulsed, got entangled in the marsh, and being unable to escape from it, they perished in it. Some perhaps sunk at once, others died after a time; but many perished through ignorance of the paths and passages: as might easily be the case in the event of a battle on one of the great bogs in *Ireland*. This is not inconsistent with the size of the oak—a *great* oak, whereon *Absalom* was hanged; as both trees and plants may flourish on *moist* ground; or at different places in the same forest.

CHAPTER XXI. VERSE 20.

A man of stature, who had on every hand six fingers, and on every foot six toes, four and twenty in number. The number of this man's fingers and toes is extraordinary, and more extraordinary still, if he was, as our translation adds, a man of *great* stature. It is usually among dwarfs, rather than giants, that nature produces such superfluities of members. Our *Philosophical Transactions* record several wonders of nature, not less remarkable than this, though I have not happened to note any of this very kind.

Since this was written, and indeed very recently we have had the history and particulars of a family in which this uncommon formation, of six fingers on each hand and six toes on each foot, is well authenticated. It is that of *Zerah Colburn*, an

an American child distinguished for his natural talent in the calculation of difficult arithmetic. The history is given at large, by Mr. A. Carlisle, in the Philosophical Transactions for 1814. Part I.

It seems that several generations have received this peculiarity, in succession; and that several children of the same family have possessed it, at the same time; so that no doubt can be entertained on the certainty of the fact, and on the prevalence of this conformation in the family;—in which it is transmitted from parent to child.

The reader will be surprised, perhaps, should this supposed *giant* be reduced to a *dwarf*; and yet the natural import of the Hebrew words leads to that idea of him: for, as “days of number,” are *few*, Job. xvi. 22.; and “men of number,” are *few*, Deut. xxxiii. 6.; so “men of measure” are *dwarfs*, Isaiah, xlv. 14. The words there, however, are *anushi maduh*, inferior men of measures; but here they are, *aish madin*, a superior man of measures: nevertheless the idiom seems to denote rather a *chief* by birth, or office, than a noble personage, by stature. That dwarfs may be valiant, needs no proof; but if any be wanting, witness “*Uladislaus Cubitatis*, king of Poland, A.D. 1306, who fought more battles and obtained more victories than any of his long-shanked predecessors. *Nullam virtus respuit staturam*.” Others might be selected.

But the difficulty of the passage lies in the observation, that the four champions mentioned in the verses 16, to 22, were ALL sons to the GIANT, i. e. to one person. The word *Haraphah*, rendered *giant*, signifies, so far as I can find, *weakness*, &c. and is taken by a *metonymy*, or change of import, for a *terrifier*, one who *weakens* another by terrifying him. I suspect, therefore, that this word does not describe a *giant* in stature, but some public champion among the Philistines, a kind of officer, whose duty was connected with the army. This is conjecture only; but, 1. This is not the word for *giant* elsewhere. 2. The first of these champions was *Ishbi, son of Ob*: was *Ob* really his father's name? perhaps not: *Ob* signifying a large skin-bottle, say a *cask*, it describes his great size—son of bulk, son of great magnitude: son is often taken in this sense in Hebrew. Such a man is not unlikely to have been “son of *Haraphah*”—the national champion; or educated in the military art by him. *Saph* was the second son, or scholar of *Haraphah*. *Goliath of Gath*, was the third son of *Haraphah*. In order to take off the reference of this *Goliath*, to him whom *David* slew, our translators have made him his *brother*, contrary to the text; the probability is, that this was either the name of this warrior's *trade*, or of his family. I think it clear, that these Philistines were killed at different times, and at considerable intervals of years; which renders it unlikely that they should all be sons of one person. If the reader can form

a better hypothesis than the above, he is freely welcome. The history, at present, seems to need further *eclaircissement*.

CHAPTER XXIII. VERSE 10.

THE LAST WORDS OF DAVID.

IT appears to me, that this ode, is not happily represented in our version; a little trouble, with some consideration, may assist in relieving it from several defects, and the reader, it is hoped, will excuse the attempt. On looking to Exod. xxiv. with the plate, the reader will find at the close of that article, an endeavour to illustrate the passage, Deut. xxxiii. 3. wherein *Jehovah* is compared to the rising sun. Perhaps we shall err but little, if we connect the same idea with the sentiments of this ode;—but then, this ode rather refers to the brightness of the morning, illuminated by the solar rays, than like the simile of *Moses* to the sun itself. The *grass*, to which the poet alludes, is (*desha*,) green, growing grass; and the *thorns* are the (*kutj*,) plants mentioned, Gen. iii. 18. These are all articles of natural philosophy, and therefore they appertain to our plan. In considering this poem, we should endeavour to conceive of an eastern morning, and the effect of a morning shower on vegetables, in the East.

A few words additional by way of shewing the force of the Psalmist's allusion, will not be thought improperly introduced or rashly redundant.

Thus saith DAVID, son of *Jesse*;
Thus saith the man of valour established in dignity:
The Anointed of the God of Jacob,
The pleasant Psalmist of Israel:—
The SPIRIT of the LORD spake by me,
And his Word was upon my tongue.
The God of Israel saith to me;
To me doth the Rock of Israel speak:—
The Ruler over men, the JUST,
The Ruler in the fear of God,
Is like the light of the morning at sun rise,
A morning without mistiness,
A morning beaming splendour,
A morning distilling showers on the tender grass of the earth:
Even so; is not my House with God?
Even such; is not the permanent Covenant settled with me,
Disposed in all points, and securely kept?
Such, is all my Salvation; all my desire:
Whereas, the profligate shall never flourish:
Like a thorn shall they be torn up, to the very last,
And, because, they can not be gathered by hand,
Therefore the man who toils at them, till weary,
Shall force them up, by a long lance-shaft amply shod with iron.
Yea, in the fire, they shall be burned for a burning.

These be the names of the mighty men whom *David* had in the seat. He who sat in the seat, the *Tachmonite*, &c.

The comparison of the royal poet, appears to be of his own family, to the growing vegetable, favoured by prolific showers, &c. contrasted with wicked *thorns*, which are only to be destroyed, and burned.

To explain this Ode further, observe that the revolutions of day and night are said to be appointed by “a covenant,” Jer. xxxiii. 20–25. As that

that covenant is permanent, unfailing, unalterable, so, says, the Royal Psalmist is the covenant made with me, appointing my family to the station of Hereditary Sovereignty over Israel.—But then, he seems to imply that they ought to be as beneficent by their rule and dominion, to their subjects, as a clear sun-shiny morning is to the springing grass of the earth. Their character also ought to be that of perfect clearness, brightness, splendour, as a fine morning, itself.

It is possible that in the *Belials*—here rendered “profligate” the writer might hint at his *quondam* rivals, of the house of Saul, several of whose sons were named—*Baal*, or *Boshet*;—as *Ish-boshet*, *Mephi-boshet*, &c. And they appear also to have practised idolatry. Otherwise this appellation must be taken as descriptive of profligates, generally.

The concluding words, rendered in our public version, “in the same place;” are introduced, it is presumed, more correctly in the following phrase: for, these words, if referred to the thorns, are of no avail, or propriety; but, as they are here placed, they form a part of the title of the following matter, which is not complete without them.

It is very true, that we should always be cautious in transpositions and conjectures; to indulge such disposition is dangerous: but on the other hand, to refuse the assistance which it *sometimes* affords, especially in poetry, is to cramp the English language into confusion for the sake of preserving an order of Hebrew words, to which, not even the Masorites themselves, could possibly attach either mystery or meaning.

AN.

EXPOSITORY INDEX.

TO THE FIRST BOOK OF

KINGS,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER IV. VERSES 22, 23.

SOLOMON's provision for one day, was thirty measures of FINE FLOUR and threescore measures of MEAL, ten fat OXEN, and twenty OXEN out of the pastures, an hundred SHEEP, beside HARTS, and ROEBUCKS, and FALLOW-DEER, and FATTED FOWL.

The reckoning of provisions as expences is customary in the East, where every thing is not as among ourselves, referred to the standard of money. Solomon's provision reduced to yearly expences, makes, of fine flour, nearly 11,000 measures; of meal, nearly 22,000 measures; oxen, nearly 11,000; sheep, 36,500. [Vide FRAGMENT to CALMET, No. xxvii.]

The particulars of this provision are: thirty

1. FINE FLOUR, *selat*. This probably means, sifted flour, bolted flour, or flour of wheat: while,

2. *Kemach*, MEAL, means a coarser kind of wheaten flour, or a meal of some other corn, oats, or barley, for instance: this no doubt was for persons of inferior rank, who were fed from the table, *i. e.* the provision of Solomon.

SCHEUZER seems to think that the fine flour was used in pastry, sweet-cakes, and other delicacies, observing from Martial, lib. xiii.

*Nec dotes poteris similæ numerare, nec usus,
Pistori toties cum sit & apta coquo.*

“The uses to which bakers and cooks apply fine flour, are innumerable.”

It must be owned, that the pastry expences of some of the Roman emperors, were beyond belief; and

and we find, so early as the days of Joseph, Gen. xl. 2. that Pharaoh had his chief baker, who, no doubt, had others under him in the kitchen establishment.

3. **FAT oxen, *bakar beraim*.** Oxen fattened in the house, stalled oxen (or, rather young bulls, for mutilated oxen were forbidden among the Hebrews) the seven fat cows which Pharaoh saw in his dream, Gen. xli. 2. are described as *beriath*, fattened, carefully fattened; which word is the feminine of that in our text.

4. **OXEN out of the pastures, *bakar-roi*;** bullocks fed in rich pastures, but not stalled.

We read, Prov. xv. 17. "better is a dinner of herbs where love is, than a sumptuous dinner on a stalled ox, and hatred therewith:" and Math. xxii. 4. the king says, "my oxen, and my fatlings [stalled?] are killed."—The stalled ox seems to take the preference over all kinds of provisions. In Homer, we find the same: and many are the fat oxen which his heroes consume.

5. **SHEEP, *Tjon*.**

6. **HARTS, *Ail*.** See on Gen. xlix. 21. Plate.

7. **ROEBUCKS, *Tjebi*.** The roebuck is an inhabitant of cold climates; and therefore, is not likely to have formed part of the daily provisions of Solomon's table: the true animal is the Gazelle or Antelope, which abounds in hot climates, which is chased with great avidity, for the sake of its flesh, and is indeed, the venison of the country. There are many kinds of Gazelles: that particular species, in Scripture, called the *Tjebi*, requires ascertaining. See on Deut. xiv. 4. No. 5. 8.

8. **FALLOW DEER, *Iachmur*.** See on Deut. xiv. 4. No. 6.

9. **FATTED FOWL, *Barbarim abusim*.** There is some difficulty in these words. *Barbarim* seems, at first sight, to refer to a country, *Barbary*, as our Turkey, does to Turkey in the East, yet we have no authority for saying, that the country we now call *Barbary*, was known so early under this name, or that it furnished these fowls. It seems better to refer the word to the root (כר) *bar*, signifying, a free open place, a place for wandering in: (whence *Barbary*, a country of wanderers) and therefore *barbar*, a wild, roaming country; a desert: and so we read in the Chaldee, Dan. ii. 38. wild beasts, i. e. beasts of a wild country, or nature (*chiuth bara*); a wild bull (*tur bar*); and others. If this be just, our phrase of wild fowl, would answer exactly to that in the text: we have already had wild animals, as the *Tjebi*, and *Iachmur*; and that fowl, as an article of provision, should be wholly omitted, is hardly supposable.

We, however, usually make a distinction between fowl cooped up for fattening, and those not

cooped up—barn-door fowl: how far this applies to eastern management I do not know. Our version, in rendering "fatted fowl," follows the Chaldee, Syriac, and Vulgate; nevertheless, the weight of evidence seems to preponderate in favour of fowl not cooped up for fattening; but roaming at liberty, whether of the domestic, or wild kinds: possibly, both are included. *Wild game* might be a convenient rendering, perhaps.

CHAPTER IV. VERSE 32.

SOLOMON spake of trees, from the CEDAR, which is in Lebanon, to the HYSSOP, that springeth out of the wall: he spake also, 1. of BEASTS: and, 2. of FOWLS; and, 3. of CREEPING THINGS; and, 4. of FISHES.

We learn from this passage, that whatever might be the gift of wisdom bestowed on Solomon from on high, he cultivated it by the most assiduous study; that he collected the remarks of others, and remarked also for himself whatever of natural principles, and natural occurrences, came within his reach. We see also, that he treated them systematically, placing first, among trees, the cedar; and ending with—it is likely some kind of moss, or other minute plant, which grows on walls. That the word rendered *Hyssop*, is capable of this sense, seems clear, from this description of it; for *Hyssop* itself does not grow on walls. Solomon also placed Botany before Natural History, which latter, he arranged into, 1. Great Beasts, quadrupeds; 2. Birds; 3. Reptiles, whatever creeps along the ground; 4. Fishes, whatever inhabits the waters. We have seen, on Deut. iv. 16. that the same order of natural history was observed by Moses. Is it impossible that the principles, and perhaps, some works of Moses, on this subject, might have reached the time of Solomon, who here evidently follows him?

It is a curious enquiry, whether any copies of these works of Solomon are still in being? Perhaps when Alexander over-run Asia, Aristotle might procure them; and might even make them the foundation of his own system of natural history. This is very consistent with the character of Aristotle, and is much more credible than the preservation of magical books which abuse the name of Solomon, by claiming him as their author. It may be remarked also, that an eminent naturalist is often quoted, and studied, by others, who nevertheless, vary their systems from his; but this can only be when his works have been published. Perhaps Solomon having no need, did not publish his collections:—if he published them, they are totally lost, unless some parts of them are preserved in foreign languages.

CHAPTER:

CHAPTER V. VERSE 11.

SOLOMON gave Hiram 20,000 measures of wheat, and 20,000 measures of oil. The word rendered *measure* is *cor*; and being applied both to the wheat and to the oil, shews, that the *cor* was a measure both for dry things, and for liquids. That Judea abounded in wheat, and that the Tyrians imported it from thence, and indeed, depended on this supply, appears from Ezek. xxvii. 17. and from Acts, xii. 10. where we read, that *their country was nourished by the country of king Herod*. N.B. Josephus reads, 2,000 *cors* of oil.

We read, 2 Chron. ii. 10. that Solomon gave to those who cut timber for him, 20,000 *cors* of *beaten* wheat; 20,000 *cors* of barley; 20,000 *baths* of wine; 20,000 *baths* of oil." This provision for the workmen was, no doubt, distinct from the *premium* paid to Hiram for his grant of their services. The *beaten* wheat of this passage *may* refer to the same mode of getting off the husk as is used to *rice*, [*q.* may it refer to rice itself?] or to the *pounding* it into meal.

That measures of the same nature were continued in use in later ages, appears from Luke xvi. 5. where we read of "an hundred *baths* of oil, and an hundred measures, *cors*, of wheat."—That Judea abounded in oil, vide on Gen. xxxvii. 25.

CHAPTER X.

THE QUEEN OF SHEBA.

THIS queen's visit to Solomon is one of the most remarkable events of his reign. As it appears to have had important consequences in her own country, we shall insert Mr. BRUCE's account of it, as related in the annals of Abyssinia, which that traveller has communicated to the public. It is so very seldom that we are able to offer the *counterpart* of Scripture histories, from writers of other countries, that we are glad to embrace an opportunity of what writers against the authority of Scripture, have called "impartial testimony," we doubt not, that could we appeal to antient histories on other subjects also, that their evidence would be no less corroborative of Scripture narrations.

"It is now that I am to fulfil my promise to the reader, of giving him some account of the visit made by the queen of Sheba, (it should properly be Saba, Azab, or Azaba, all signifying *South*,) as we erroneously call her, and the consequences of that visit: the foundation of an Ethiopian monarchy, and the continuation of the sceptre in the tribe of Judah, down to this day.

We are not to wonder, if the prodigious hurry and flow of business, and the immensely valuable transactions they had with each other, had greatly

familiarised the Tyrians and Jews, with their correspondents the Cushites and Shepherds on the coast of Africa. This had gone so far, as very naturally to have created a desire in the queen of Azab, the sovereign of that country, to go herself and see the application of such immense treasures that had been exported from her country for a series of years, and the prince who so magnificently employed them. There can be no doubt of this expedition, as Pagan, Arab, Moor, Abyssinian, and all the countries round, vouch it pretty much in the terms of Scripture.

Many (such as Justin, Cyprian, Epiphanius and Cyril,) have thought this queen was an Arab. But Saba was a separate state, and the Sabæans a distinct people from the Ethiopians and the Arabs, and have continued so till very lately. We know, from history, that it was a custom among these Sabæans, to have women for their sovereigns in preference to men, a custom which still subsists among their descendants.

——— *Medis levibusque Sabæis,
Imperat hos sexus reginarumque subarmis,
Barbariæ, pars magna jacet.*

CLAUDIAN.

By *Barbariæ* is meant the country between the tropic and the mountains of Abyssinia, the country of Shepherds, from *berber*, shepherd.

Her name, the Arabs say, was *Belkis*; the Abyssinians, *Macqueda*. Our Saviour calls her *Queen of the South*, without mentioning any other name, but gives his sanction to the truth of the voyage. "The queen of the South (or Saba, or Azab) shall rise up in the judgment with this generation, and shall condemn it; for she came from the uttermost parts of the earth to hear the wisdom of Solomon; and, behold, a greater than Solomon is here," Matth. xii. 42. Luke, xi. 31. No other particulars, however, are mentioned about her in Scripture; and it is not probable our Saviour would say she came from the uttermost parts of the earth, if she had been an Arab, and had near 50 deg. of the continent behind her. The gold, the myrrh, cassia, and frankincense, were all the produce of her own country.

Whether she was a Jewess or a Pagan is uncertain; Sabæism was the religion of all the East. It was the constant attendant and stumbling-block of the Jews; but considering the multitude of that people then trading from Jerusalem, and the long time it continued, it is not improbable she was a Jewess. "And when the queen of Sheba heard of the fame of Solomon concerning the name of the Lord, she came to prove him with hard questions," 1 Kings, x. 1. and 2 Chron. ix. 1. Our Saviour, moreover, speaks of her with praise, pointing her out as an example to the Jews, Matt. xii. 42. and Luke, xi. 31. And, in her thanksgiving

giving before Solomon, she alludes to *God's blessing* on the *seed* of Israel for ever, 1 Kings, x. 9. and 2 Chron. ix. 8. which is by no means the language of a Pagan, but of a person skilled in the ancient history of the Jews.

She likewise appears to have been a person of learning, and that sort of learning which was then almost peculiar to Palestine, not to Ethiopia. For we see that one of the reasons of her coming, was to examine whether Solomon was really the learned man he was said to be. She came to try him in allegories, or parables, in which Nathan had instructed Solomon.

The annals of Abyssinia, being very full upon this point, have taken a middle opinion, and by no means an improbable one. They say she was a Pagan when she left Azab, but being full of admiration at the sight of Solomon's works she was converted to Judaism in Jerusalem, and bore him a son, whom she called Menilek, and who was their first king. However strongly they assert this, however dangerous it would be to doubt it in Abyssinia, I will not here aver it for truth, nor much less still will I positively contradict it, as Scripture has said nothing about it.

The Abyssinians, both Jews and Christians, believe the xlvth Psalm to be a prophecy of this queen's voyage to Jerusalem; that she was attended by a daughter of Hiram's from Tyre to Jerusalem, and that the last part contains a declaration of her having a son by Solomon, who was to be king over a nation of Gentiles.

To Saba, or Azab, then, she returned with her son Menilek, whom, after keeping him some years, she sent back to his father to be instructed. Solomon did not neglect his charge, and he was anointed and crowned king of Ethiopia, in the Temple of Jerusalem, and at his inauguration took the name of David. After this he returned to Azab, and brought with him a colony of Jews, among whom were many doctors of the law of Moses, particularly one of each tribe, to make judges in his kingdom, from whom the present Umbares (or Supreme Judges, three of whom always attend the king) are said and believed to be descended. With these came also Azarias, the son of Zadok the priest, and brought with him a Hebrew transcript of the law, which was delivered into his custody, as he bore the title of Nebrit, or High Priest; and this charge, though the book itself was burnt with the church of Axum in the Moorish war of Adel, is still continued, as it is said in the lineage of Azarias, who are Nebrits, or keepers of the church of Axum, at this day. All Abyssinia was thereupon converted, and the government of the church and state modelled according to what was then in use at Jerusalem.

By the last act of the queen of Sheba's reign she settled the mode of succession in her country for the future. First, she enacted, that the crown should be hereditary in the family of Solomon for ever. Secondly, That, after her, no woman should be capable of wearing that crown or being queen; but that it should descend to the heir male, however distant, in exclusion of all heirs female whatever, however near; and that these two articles should be considered as the fundamental laws of the kingdom, never to be altered or abolished. And, lastly, That the heirs male of the royal house, should always be sent prisoners to a high mountain, where they were to continue till their death, or till the succession should open to them.

What was the reason of this last regulation is not known, it being peculiar to Abyssinia; but the custom of having women for sovereigns, which was a very old one, prevailed among the neighbouring shepherds in the last century, and for what we know, prevails to this day. It obtained in Nubia till Augustus's time, when Petreius, his lieutenant in Egypt, subdued her country and took the queen Candace prisoner. It endured also after Tiberius, as we learn from St. Philip's baptizing the eunuch, (Acts, viii. 27, and 38,) servant of queen Candace, who must have been successor to the former; for she, when taken prisoner by Petreius, is represented as an infirm woman, having but one eye. (This shews the falsehood of the remark Strabo makes, that it was a custom in Meroë, if their sovereign was any way mutilated, for the subjects to imitate the imperfection. In this case, Candace's subjects would have all lost an eye, Strabo, lib. xvii. p. 777, 778.) Candace indeed was the name of all the sovereigns, in the same manner as Cæsar was of the Roman emperors. As for the last severe part, the punishment of the princes, it was probably intended to prevent some disorders among the princes of her house, that she had observed frequently to happen in the house of David, (2 Sam. xvi. 22. 1 Kings ii. 13.) at Jerusalem.

The queen of Saba having made these laws irrevocable to all her posterity, died, after a long reign of forty years, in 986 before Christ, placing her son Menilek upon the throne, whose posterity, the annals of Abyssinia would teach us to believe, have ever since reigned. So far we must indeed bear witness to them, that this is no new doctrine, but has been stedfastly and uniformly maintained from their earliest account of time; first when Jews, then in later days after they had embraced Christianity. We may further add, that the testimony of all the neighbouring nations is with them upon this subject, whether they be friends or enemies. They only differ in name of the queen, or in giving her two names. As for her being an Arab, the objection is still easier got over. For all

all the inhabitants of Arabia Felix, especially those of the coast opposite to Saba, were reputed Abyssinians, and their country part of Abyssinia, from the earliest ages, to the Mahometan conquest and after. They were her subjects; first, Sabeans Pagans like herself, then converted (as the tradition says) to Judaism, during the time of the building of the Temple, and continuing Jews from that time to the year 622 after Christ, when they became Mahometans.

Of their kings of the race of Solomon, descended from the queen of Saba, the device is a lion passant, proper, upon a field gules, and their motto, "*Mo Anbasa am Nizilet Solomon am Negadé Jude;*" which signifies, "The Lion of the Race of Solomon and Tribe of Judah hath overcome." So far Mr. BRUCE, Vol. I. p. 471. &c.

I wish to remark on the motto of the Abyssinian kings, that we find allusions to it in Scripture. It appears to have originated from the simile, Gen. xlix. 9. and to this motto, or title, a reference may be thought, Psalm, l. 22. "consider this, ye that forget God, lest I tear you in pieces, and there be none to deliver:"—where the phrase differs from Psalm, vii. 2. in which place, the psalmist speaks of being himself torn in pieces: see Micah, v. 8. But I think there is a direct quotation of this motto in Rev. v. 8. "THE LION OF THE TRIBE OF JUDAH HATH PREVAILED," or overcome; so that the comparison of a chief of the tribe of Judah, to a lion, is not only sanctioned by the original comparison in Genesis, but appears to have been constantly kept in memory, and preserved by a public and authoritative memorial: in fact, by national and royal insignia.

Mr. BRUCE adds the following information, which shews the practicability of the queen of Sheba's journey. Indeed journeys of a much greater length are now annually made, in order to visit Mecca; and it is very credible, that the antiquity of similar journeys is very great. We have queried elsewhere, whether they may not be as old as Ishmael.

"In the gentle reigns of the Mamalukes, before the conquest of Egypt and Arabia, by Selim, a caravan constantly set out from Abyssinia directly for Jerusalem. They had then a treaty with the Arabs. This caravan rendezvoused at Hamayen, a small territory, abounding in provisions, about two days' journey from Dobarwa, and nearly the same from Masuah: it amounted sometimes in number to a thousand pilgrims, ecclesiastics as well as laymen.

They travelled by very easy journeys, not above six miles a-day, halting to perform divine service, and setting up their tents early, and never beginning to travel till towards nine in the morning. They had hitherto passed in perfect safety, with drums beating, and colours flying, and in this way, tra-

versed the desert by the road of Suakem. TRAVELS, vol. ii. p. 158.

VERSE 10.

The queen of Sheba gave to Solomon one hundred and twenty talents of gold,

This text invites us to calculate the quantity of gold received in large masses by Solomon, from foreign parts.

	Talents.	Value.
Chap. ix. 14. from Hiram.	120 . .	£.657,000
— 28. from Ophir.	420 . .	2,299,500
x. 10. from Sheba.	120 . .	657,000
	660	£3,613,500

We find in verse 14, that Solomon received in one year 666 talents of gold—was this the same as we have reckoned above, with an addition of six talents from some other quarter? or, was it a regular payment made *annually*, and therefore to be added to what was occasional only? It seems to have been separate from his regal tributes from foreigners; but that it was the produce of taxes levied on Israel, seems difficult to be admitted.

VERSES 11, 12.

OPHIR.

The contradictory opinions on the subject of that Ophir, whence Solomon's ships imported gold, shew the difficulty of determining geographical questions, when only the names of places are recorded. Indeed, in this instance, the other articles brought by the fleet are mentioned in addition, together with the duration of the voyage; nevertheless, the main question is not easily determined.

The opinion which fixes Ophir on the east coast of Africa, has lately been very ingeniously stated, and strongly defended, by Mr. BRUCE, whose sentiments we shall lay before the reader.

He justly observes, that "in order to come to a certainty where this Ophir was, it will be necessary to examine what Scripture says of it, and to keep precisely to every thing like description which we can find there, without indulging our fancy farther. 1st, Then, the trade to Ophir was carried on from the Elanitic gulf through the Indian Ocean. 2dly, The returns were gold, silver, and ivory, but especially silver, 1 Kings, x. 22. 3dly, The time of the going and coming of the fleet was precisely three years, 1 Kings, x. 22. 2 Chron. ix. 21. at no period more nor less.

Now, if Solomon's fleet sailed from the Elanitic gulf to the Indian ocean, this voyage of necessity must have been made by monsoons, for no other winds reign in that ocean. And what certainly shews this was the case, is the precise term of three years in which the fleet went and came between Ophir and Ezion-gaber.

These mines of Ophir were probably what furnished the East with gold in the earliest times; great

great traces of excavation must therefore have appeared.

But John Dos Santos says, "That he landed at Sofala in the year 1586; that he sailed up the great river Cuama as far as Tete, where, always desirous to be in the neighbourhood of gold, his order had placed their convent. Thence he penetrated for above 200 leagues into the country, and saw the gold mines then working at a mountain called *Afura*. At a considerable distance from these are the silver mines of Chicoua; at both places there is a great appearance of ancient excavations; and at both places the houses of the kings are built with mud and straw; whilst there are remains of massy buildings of stone and lime.

Every thing then conspires to fix the Ophir of Solomon in the kingdom of Sofala, provided it would necessarily take neither more nor less than three years to make a voyage from Ezion-gaber to that place and Tarshish, and return.

The vessel trading to Sofala sailed from the bottom of the Arabian gulph in summer, with the monsoon at north, which carried her to Mocha. There the monsoon failed her by the change of the direction of the gulph. The south-west winds, which blow without cape Gardafan in the Indian ocean, forced themselves round the cape so as to be felt in the road of Mocha, made it uneasy riding there. But these soon changed, the weather became moderate, and the vessel we suppose in the month of August, was safe at anchor under cape Gardafan, where was the port which, many years afterwards, was called *Promontorium Aromatum*. Here the ship was obliged to stay all November, because all these summer months the wind south of the cape was a strong south-wester, as hath been before said, directly in the teeth of the voyage to Sofala. But this time was not lost; part of the goods bought to be ready for the return was ivory, frankincense, and myrrh; and the ship was then at the principal mart for these.

Our author supposes, that in November the vessel sailed with the wind at north-east, with which she would soon have made her voyage; but off the coast of Melinda, in the beginning of December, she there met an anomalous monsoon at south-west, in our days first observed by Dr. Halley, which cut off her voyage to Sofala, and obliged her to put into the small harbour of Mocha, near Melinda, but nearer still to *Tarshish*, which we find here by accident, and which we think a strong corroboration that we are right as to the rest of the voyage. In the Annals of Abyssinia, it is said that Anda Sion, making war upon that coast in the 14th century, in a list of the rebellious Moorish vassals, mentions the chief of *Tarshish* as one of them, in the very situation where we have now placed him.

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Solomon's vessel, then, was obliged to stay at *Tarshish* till the month of April of the second year. In May, the wind set in at north-east, and probably carried her that same month to Sofala. All the time she spent at *Tarshish* was not lost, for part of her cargo was to be brought from that place; and she probably bought, bespoke, or left it there. From May of the second year, to the end of that monsoon in October, the vessel could not stir; the wind was north-east. But this time, far from being lost, was necessary to the traders for getting in their cargo, which we shall suppose was ready for them.

The ship sails, on her return, in the month of November of the second year, with the monsoon south-west, which in a very few weeks would have carried her into the Arabian gulph. But, off Mocha, Melinda and Tarshish, she met the north-east monsoon, and was obliged to go into that port and stay there till the end of that monsoon; after which a south-wester came to her relief in May of the third year. With the May monsoon she ran to Mocha within the straits, and was there confined by the summer monsoon blowing up the Arabian gulph from Suez, and meeting her. Here she lay till that monsoon, which in summer blows northerly from Suez, changed to a south-east one in October or November, and that very easily brought her up into the Elanitic gulph, the middle or end of December of the third year. She had no need of more time to complete her voyage, and it was not possible she could do it in less."

Such is a very short and imperfect abstract of our author's reasons for placing Ophir in Sofala.

Another opinion has fixed *Ophir* on the western coast of Africa; but this is not so likely to become popular, as that which looks eastward. Indeed, the major part of learned men have rather looked to the East Indies for this land of gold, and many things said in favour of this opinion are exceedingly strong.

But, there appear to be some circumstances which have been overlooked in this enquiry: as, 1. That Solomon did not pretend to any royalty over Ophir, be it where it might, he therefore obtained his gold, &c. in a mercantile manner, by exchange. Now, if Ophir was in an *uncivilized* country, what commodities had he to give for its natural productions? The probability is, that he exported the oils, wines, &c. of Judea, (vide on Gen. xlix. 11, 12. *ad fin.*) together with a number of Tyrian articles, not all the production of that city, or of his own kingdom, but some foreign; as tin, for instance. Of what value were these to a barbarous people? 2. That as Hiram's servants were called in to navigate the vessels of Solomon, it is probable they knew the course they were to

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go. Tyre was no port on the Red-sea; from whom then did they receive their information? 3. It is likely that other princes, beside Solomon, traded also to Ophir; for, how came he, if the first, to think of the enterprize? Most likely, he only put in for a share of that trade which he already knew to be lucrative. 4. In proportion as the seat of Paradise is moved eastward, as by the late discoveries of Capt. WILFORD (vide the Map of Paradise, on Gen. ii. 8.) it appears to be, so far is the first family which peopled the land of Ophir moved eastward too; for if Havilah, Gen. x. 22. be the person who gave name to the land of Havilah, Gen. ii. 11. of which it is observed, "there is gold, and the gold of that land is good," then—as his brother Ophir is mentioned with him, and, no doubt, was situated near him, it connects the land of Ophir with the land of Havilah; and the land of Havilah is connected with Paradise, and Paradise is placed further east than before, even in the eastern province, Bactria; which agrees exactly with the remark of Moses, "their dwelling was from Mesha as thou goest to Sephar, a mount of the East"—or Bactria.

If the gold of Havilah was famous in the days of Moses, we see how easily Ophir, its neighbour, might afterwards rival, or exceed it. Vide our Inquiries respecting the Situation of Paradise, page 3, with the Plate, on Gen. ii. 8.

It is not certain that Solomon's fleet cast anchor in Ophir, as in a port, but rather, that the commodities they fetched were brought by them from a public mart, or *emporium*, where they procured them without trouble; much in the same manner as we send to China for tea; but the tea does not grow near the port, from whence it is shipped, it is only brought there for exportation.

If we suppose that the vessels of Solomon coasted along the Red-sea, the Arabian sea, and the Persian sea, to the western coast of India, we must needs allow a considerable portion of time for that purpose. Moreover, there will still remain the question, whether the three years that the fleet was absent, were *full* years, or rather, according to the Hebrew mode of reckoning, the *end* of the first, the *whole* of the second, and the *beginning* of the third year.

From these hints we infer, that Solomon having had communications by land, with the East, desired more direct intercourse with it, which he proposed to effect by sea. We know also, that the Egyptian kings maintained an intercourse with India during many ages: and what they did from one side of the Red-sea, Solomon might do from the other. Perhaps their navigation was the consequence of his.

I consider the notion of *Tarshish* as denoting a town, or port, as intirely beside the question; being of opinion, that Solomon's *navy of Tarshish*, verse 22, means ships built after the manner of Tarshish, with iron bolts, and in a capital manner, fitted to stand the ocean, distinct from those lesser vessels used on the Nile, or on the Mediterranean.

We shall extract from CALMET, article OPHIR, a supposition on principles not unlike those stated above; only, instead of the rivers *Tigris* and *Euphrates*, the reader will substitute the *Indus*, in consequence of the further *easting* of Paradise.

"We think that Ophir the son of Joktan, with his brethren, peopled the countries between the mountain *Masius*, and the mountains of *Saphar*, which are probably those of the *Tapires* or *Saspires*, towards *Armenia*, *Media*, and the sources of the *Tigris* and *Euphrates*; for we do not pretend at this day to assign the limits of those countries. *Eustathius* of *Antioch*, in *Hexaemer.* as well as we, places Ophir in *Armenia*. The emperor *Justinian* divided *Armenia* into four parts, and one of these parts was called *Sophara*. *Strabo*, lib. xi. places on the *Phasis* a people called *Sarapenes*. *Quadratus*, apud *Stephan.* in *Ἰνδία*, speaks of the *Obarenians* on the river *Cyrus*; and *Pliny*, of the *Suarni*, situated between the *Caspia Portæ*, the *Gordian* mountains, and the *Euxine* sea. The gold of *Pharvaim*, or of *Sepharvaim*, is the same as the gold of Ophir, 1 *Kings*, ix. 26, 27, 28. compared with 1 *Chron.* xxix. 4. An *S* has often been added to the beginning of words to shew their aspiration; and the Septuagint sometimes reads *Sophir* for Ophir. *Sepharvaim* has much relation to Mount *Saphar* mentioned by Moses.

Perhaps to this will be replied, First, that in the country where we place Ophir, all the things are not to be found, that Solomon fetched home by his fleet. Secondly, that this country does not border on the sea, nor could there be any passing thither with a fleet. Thirdly, that this could not be a three years voyage. But I answer, that the fleet of Solomon in its voyage stopped at several harbours, in each of which it took in such things as were necessary. It took in apes, ebony, and parrots, on the coast of *Ethiopia*. It took in gold at Ophir, or at the place of traffic, whither the people of Ophir resorted. It might also find ivory there, or if you please, in some of the ports of *Arabia*, where also it might be supplied with spices: this fleet might trade on both sides of the Red-sea; on the coasts of *Arabia* and *Ethiopia*; and on parts of *Ethiopia* beyond the *Straits*, when it had entered the ocean. Thence it passed up the *Persian* gulph, and might visit the places of trade on both its shores, and thence run up the *Tigris*

Tigris or *Euphrates*, as far as these rivers were navigable.

The ancients tell us the names of several places of traffic on the *Tigris* and *Euphrates*, which were heretofore famous, before they had raised banks on the *Tigris*, or made out-lets in the *Euphrates*, which afterwards interrupted the navigation of those rivers, or made it more difficult. *Vide Strabo*, in the first book of his Geography. Thus, though the countries were not maritime, yet they might trade with them by going up the *Tigris* or *Euphrates*." So far our learned author.

We have hinted at the *Indus*, rather than the *Tigris* as being the river to the mouth of which the fleet of Solomon sailed; in support of this suggestion it may not be improper to add a remark, by way of illustration.

It is to be understood, that the river *Indus* was navigable (as it still is) for many miles up the stream, for vessels of considerable burthen; and where the depth of water did not allow ships of large size, their cargoes were put on board smaller craft, and distributed among towns, &c. many hundreds of miles inland. Add to this, that at the mouth of the main stream of the *Indus* (for the *Indus* is divided into many streams at its discharge into the Ocean, and forms a *Delta*, like the Nile) were towns and cities, places of great commerce. To these the ships of Solomon might resort, and here they might obtain the returns—gold, &c. they came in quest of.

The great and well founded reputation of Major Rennell in matters of Geography, antient as well as modern, forbids our quitting this subject without noticing his opinion, that Solomon's fleets performed *two voyages* altogether distinct in their course and destination. He appeals to the passages 1 Kings, chap. ix. 26. and x. 22. compared with 2 Chron. viii. 17. and ix. 21.

Although *gold* made a part of the commodities brought by each fleet, yet he observes, some of the other articles differ in one fleet from those of the other. It seems, that Ophir furnished *gold*, only: for we read, 1 Kings ix. 28, that the Red Sea fleet "came to Ophir, and fetched from thence gold (420 talents) and brought it to King Solomon." The same is repeated 2 Chron. viii. 17. But in 1 Kings x. the fleet is described as "a navy of Tharshish, with the navy of Hiram, which once in three years brought gold and silver, and ivory, and apes and peacocks:" and with this agrees 2 Chron. ix. 21. Now, if this "navy of Tharshish" may be taken for a different fleet from that which went to Ophir, it relieves us from fixing the term of "*three years*" for the voyage to Ophir; and occupying in it, neither more nor less; a calculation to which Bruce thought himself bound to adhere. Neither does it follow, that *three years* were fully consum-

ed in the voyage to *this* Tharshish; the ships might sail at such periods as allowed their return, at intervals of three years, between entry and entry.

It must, however, be kept in mind, that if the Ophir fleet, as distinct from the navy of Tharshish, brought gold, only,—then we are to seek for that country which could furnish the other articles, ivory, apes and peacocks. Supposing ivory to have been obtainable at Tharshish,—(near the present port of Cadiz, *i. e.* on the Isle of Leon, where that city stands)—received from the neighbouring coasts of Africa,—and supposing further that apes, or baboons, were brought from the forests of western Africa, yet *peacocks* are not natives of that coast: if we read *parrots*, as some do, this would lead us to the West Indies, or South America; unless we refer to those (as subsequently remarked) which were brought from Ethiopia. But why fetch this breed from Cadiz? The whole history would become easy enough if we might take these *Tuccium* for the *Peintado*, or Guinea fowl; and certainly those who have noticed the voice of this bird, will find a fair consonance to it, in the term *tuccium*; which seems to be an appellation derived from the note of the creature, be it what it might. But, this is treading on ground entirely new, and is submitted to the reader in the modest form of conjecture, and nothing more.

We shall now enquire more particularly into the nature of the commodities brought in return, by the fleet of Solomon.

GOLD and Silver: there is no difficulty on these words.

Ivory, shenhabim. BOCHART, thinks, this word, being *plural*, means elephants themselves, rather than their teeth; yet, according to himself, elephants, are rather called *shenhabim*. CALMET thinks, this word should be divided, *shen*, a tooth, *habim*, ebony-wood. It is, however, certain, that we do not read of elephants in the west of Asia, so early in any prophane author; nor does the prophet Ezekiel, or any other, mention them, or allude to them. Yet Ezekiel mentions ivory, chap. xxvi. 6. under the name of *shen*—the tooth; or, verse 15. *kerenuth shen*—horns of teeth; and ebony, under the name of *habenim*. That India produced ivory is well known; whence Virgil observes, *India mittit Ebur*. The elephants of Asia have always been supposed to have the advantage over those of Africa in size and strength; and the teeth which they furnish are larger and heavier by far than those brought from Africa.

APES, Kophim. The *koph* of the Hebrews seems to be the same as the *ceph* of the Ethiopians, of which *Pliny* speaks, lib. viii. cap. 19. At the games given by Pompey the Great "were shewn *cephos*'s brought from Ethiopia, which had their

their fore-feet made like a human hand, their hind legs and feet, also resembled those of a man." *Solinus*, speaking of Ethiopia, says, "Cæsar the dictator, at the game of the circus, had shewn the monsters of that country, *cephs*, (or, as others, *cefs*) whose hands and feet resembled those of mankind." The Greeks called them *kepos*, *keipos*. We now distinguish the tribe into, 1. *Monkeys*, those with long tails. 2. *Apes*, those with short tails. 3. *Baboons*, those without tails.

[In our extract from Major WILFORD's Inquiries respecting Paradise, page 3. we read, that the ancient name of LANDI *Sindh* river was *Cophes*—may the *Cophim* of our text, have been any kind of animal bred on its banks, and named from this river?]

PEACOCKS, *Tucciim*. The question is, whether this word signifies *peacocks*, or *parrots*? The *peacock* is a bird originally of India; thence brought into Persia and Media. *Aristophanes* mentions "Persian peacocks," and *Suidas* calls the peacock, "the Median bird." From Persia it was gradually dispersed into Judea, Egypt, Greece, and Europe. If the fleet of Solomon visited India, they might easily procure this bird, whether from India itself, or from Persia; and certainly, the bird by its beauty was likely to attract attention, and to be brought away among other rarities of natural history.

Reland, nevertheless, prefers the *parrot*, observing, that *Ovid* mentions a parrot sent to him from India:

Psittacus Eois ales mihi missus ab Indis.

This name *psittacus* seems to be an Indian appellation; for, according to *Pliny*, lib. x. cap. 42. the Indians called this bird *sittac*: *Eliau* and *Arrian* call it *bittacos*. The Hebrew name *tucciim*, seems to resemble the *tutak*, and *tutyk* of the Persians; and the *tutygik* of the Turks, which signifies a parrot; meaning, perhaps, the crested parrot, which we call *cacatoo*.

Jacob Hassæus, Bibliot. Brem. class ii. gives a new explication to the word *tucciim*, supposing it to be the same as *succiim*—inhabitants of caves, or caverns. Observing, 1st, That the lxx. express both *kophim* and *tucciim*, by one word *pithecoi*—monkeys: as if they were both of a class, but perhaps, one kind having tails, the other not having any. 2d, *Kimchi*, in his Lexicon assures us, that some of the ancient Jewish doctors explained *Tucciim* by a long-tailed animal; *maimon*, a long-tailed monkey:—though others thought—*gato*, a cat, which is a long-tailed animal. The Turks to this day call a monkey, *maimon*. MEZINK. Lex. p. 921, 3665, 5079.

If it be supposed that these *tucciim* are now, for

the first time, imported into Judea, then, it is rather unlikely that the word should mean *parrots*; because, as several kinds of parrots breed in Africa, and some of them are regularly brought by the caravans from the interior of Africa to Cairo in Egypt, we may naturally suppose, that these birds were occasionally brought a little farther—from Egypt to Jerusalem. This might be done by individuals for their own amusement, or, certainly, the agents of Solomon, who bought his horses, knowing his taste for natural history, would bring such rarities, in hopes of recommending themselves to him. This depends on the question, whether, as is usually supposed, these *tucciim* are absolutely new birds, which, if admitted, tends to diminish the intercourse of Solomon's fleet with Africa. *Hasselquist* mentions two kinds of parrots, 1. *Psittacus Alexandri*, the size of a pigeon. It is found in Ethiopia, from whence it is brought to Cairo. Its plumage is extremely pretty; it has a sharp cry, and easily learns to speak. 2. The *Parakeet of Africa*, the size of a cuckoo. Both seen in Egypt.

The same remark as we have made on the *parrots*, may be applied to the *apes*: is it likely that these *cophim* are now for the first time seen in Judea? if so, then if they were apes, the monkeys and apes brought into Egypt by the African caravans must have singularly escaped the notice of the Jews. It is certain that no former hint respecting them occurs in Scripture—but, that a "wilderness of monkeys" might have been had at any time from Africa without depopulating the forests of that country, admits of no denial. If then *apes* be really the creatures meant by the word *cophim*, it probably means a species of a scarcer and more uncommon nature than Africa could furnish by way of Egypt. But this goes on the supposition that they were now seen in Judea for the first time; which it is beyond our power to affirm or to deny.

The wood *Almugim*, or *Algummim*, if it be a particular species of wood, is unknown to us. Some suppose it includes the whole class of *gummy* woods. The article in CALMET may be consulted. We know that India abounds in various kinds of woods, some of which are highly scented. Africa also, has its woods, so that this article decides nothing on the track of the voyage.

It is usual to suppose, that this was a class of *gummy* woods—woods abounding in gum: may a conjecture be tolerated that, on the contrary, they were *gumless* woods, wood perfectly free from sap? for, would not woods abounding in gum be much less fit for working into any kind of instruments, furniture, &c. than those which contain no moisture? why else do our cabinet-makers, musical-instrument makers, &c. before they use them, season their woods, for years, by exposure to the air.

air, &c.? The word may easily express this idea, by a (very frequent) transposition of AL to LA, LA-gumim, gumless; or, LAmuggim, without moisture.

We have supposed that Solomon's people traded with the inhabitants of Ophir: and therefore, that, due allowances made, his fleet might go and return in eighteen months. For it seems unlikely, that (as some have supposed,) Solomon's people should themselves dig the mines for gold, and hunt elephants, monkeys, and peacocks. In this case, three full years might easily be consumed in procuring a cargo.

Having hinted that the Tyrians probably obtained their nautical knowledge of the seas of Ophir by previous experience, I remark, that we find a second Tyre on the eastern coast of the Red-sea. (Vide the Map of the Travels of Israel to Sinai. Exod. xiii.) "From whence they held a regular course with India, on the one hand, and with the eastern and southern coasts of Africa on the other. . . . They took possession of Rhinocolura, the nearest port on the Mediterranean to the Arabian gulph. Thither all the commodities brought from India were conveyed over land by a route much shorter, and more practicable than that by which the productions of the East were carried at a subsequent period from the opposite shore of the Arabian gulph to the Nile. Diod. Sic. lib. i. p. 70.; Strabo, lib. xvi. At Rhinocolura they were re-shipped and transported by an easy navigation to Tyre." ROBERTSON'S Disquisit. on India, p. 7.

VERSE 18.

The king made a throne of ivory, and overlaid it with the best gold.

IVORY is here called *shen gedul*; great tooth; a very expressive name for it. But Solomon could never be such a fool as to cover his ivory throne with gold; he *inlaid*, not *overlaid* it, he ornamented, and embossed parts of it with gold, but did not conceal the whole of it; for then, common wood would have answered the purpose as well as ivory.

The GOLD was of *Uphaz*, (עופז,) which seems to be also referred to, by the name of *Phaz*, Cant. v. ii. (*most fine gold*, Eng. Tr.) and *Uphaz*, Dan. x. 5. Jer. x. 9. I suspect, that this gold was yielded by the river *Phison*, or by a country on its banks; for, it is already observed, that "the gold of that country is good;" if this be fact, it connects *Ophir* with the *Phison* pretty strongly; and leads us to look for it in the East, where we have placed it.

VERSE 27.

The king made silver to be as stones, and cedars be as the sycamores that are in the vale, rather

in the plain or open ground. There is no doubt respecting this tree, the Sycamore: a figure of it is given in CALMET, FRAGMENT, No. cclix.

CHAPTER XII. VERSES 11, 12.

MY father chastized you with whips, but I will chastize you with SCORPIONS.

This can never mean the animal called a scorpion; nor the military machine called a scorpion, long after. It is presumed, that we see the application of it, Plate of Slaves in the East, Exod. v.

The *shuthim* are, perhaps, whips of a single cord, the *okrabbim*, whips of many cords. The Chaldee reads, horse-whip: but some interpreters think it should be thorny, like a scorpion's tail,—perhaps *knotted*—as the whip in our plate appears to be, at the end—may answer the idea.

The Latin writers of the later ages use the word *scorpion*, to express a whip armed with points, says *Isidore* (*Orig. lib. v. cap. 25.*) "if it be smooth, it is a rod; if it has either knots or points, it is justly called *scorpion*, because it makes wounds in the form of a cresent."

CHAPTER XIII. VERSE 4.

THE hand of Jeroboam, which he put forth against the prophet, dried up, so that he could not pull it in again to him. "It seems that we ought not to understand this *drying up*, of an actual *desiccation* of the arm, as if all its vital fluids had ceased to circulate in it; as if it retained no vital powers: but rather a rheumatic, or paralytic affection, which suspended the powers of motion for a time. The palsy requires a long perseverance in remedies nervous, cephalic, and discussive; unctions, lotions, frictions, fomentations, and bathings." The instantaneous cure, therefore, of this rash king, is no less wonderful than his instantaneous affliction.

CHAPTER XVII.

ELIJAH the Tishbite, said to Ahab—There shall not be rain nor dew these years. It is remarkable, that the number of years is not here specified; but, we are informed in N. T. that it was *three years and six months*. We should notice also, the prohibition of *dew* as well as *rain*, so that the whole vegetable kingdom was deprived of that indispensable moisture, without which, neither the more hardy, nor the more delicate, kinds of plants, could shoot into herbage, or support that herbage to maturity.

ELIJAH FED BY RAVENS.

"Two sorts of critics are apt to occasion displeasure:

pleasure to the orthodox; those who reduce the miracles of Holy Scripture, to a mere nothing, to deny, or to diminish, the power of God over the operations of nature, to vary them at his pleasure; and those who, desirous of discovering truth, and with the utmost veneration for truth when discovered, seek new explications of things, and depart from received interpretations: these often meet with stronger blame than they deserve; a severity even to injustice." Such are the sentiments of pious SCHEUZER, when introducing his remarks on the history of Elijah fed by ravens. He proceeds to state, that he does not think the *orehim* of the Hebrew, rendered *ravens*, means the inhabitants of a town called *Oreb*;—nor a troop of Arabs, called *Orbhim*;—but the birds, ravens.

Athanasius, (in *Synopsis*), and *Theodoret*, in *loc.* pretend, that the ravens, brought the bread in the morning, and the flesh in the evening. *Augustin*, (*Serm.* 146.) and *Eutychius* of Alexandria, p. 197. are of the same opinion, supported by the authority of the lxx. Now, if these writers considered this expression in the text as a current Hebrew phrase, possessing this import, then it may fairly be quoted in corroboration of a hint thrown out on *Exod.* xvi. 13. p. 44. that when Moses says, "at even ye shall eat flesh, and in the morning ye shall be filled with bread," he did not mean *that particular* evening or morning, but generally, the proper kinds of food for every day;—as had been their customary enjoyment. This idea supersedes the necessity of bringing *quails* in order to fulfil his promise of flesh, since he had given no such promise.

To return to Elijah: We have elsewhere observed, that the word rendered *raven* includes the whole genus, among which we find some less impure than the raven; the *rook*, for instance; and, *rooks* living in numerous societies, we have thought these were the kind of bird employed on this occasion, rather than ravens, which fly only in pairs.

After the miraculous feeding of the prophet by these birds, the brook drying up, he is obliged to remove; and it should appear principally, if not altogether, because, though the birds could furnish him with *bread* and *flesh*, they could not bring him *water*, the brook being dried up, *that* supply is exhausted. It is probable that this famine was felt more or less in neighbouring countries. *Josephus*, lib. viii. cap. 2. says, Menander, a Tyrian historian, mentions a famine of a year's duration, under Ithobal, king of Tyre.

VERSES 8—16.

The miracle of the prolongation of the contents of the cruse of oil, and the barrel of meal, is similar to that of the increase of the widow's oil, y *Elisha*, 2 Kings, iv. 2. which see.

We have observed that the word *tjepechat*, rendered *cruse*, denotes a vessel of a small kind,

1 Sam. xvi. 2. The word rendered *barrel*, is *cañ*, which denotes a vessel no larger than a woman could carry when filled with water, Gen. xxiv. 14, 15.—perhaps a jug.

CHAPTER XVIII. VERSE 41—45

ELIJAH said to *Ahab*—*There is the sound of abundance of rain.* . . . He said to his servant, *Go up now, look towards the sea—and at the seventh time, the servant said, There ariseth a little cloud out of the sea like a man's hand.*

Probably, as there had been no rain, there had been no clouds for a long time past. The rising of this small cloud, therefore, was very distinguishable. It is probable, also, that this cloud was not wholly unlike that to which the Portuguese sailors give the name of *ox's eye* (*olho de boy*), which is seen in sultry climates, usually when the sky is clear, and the sea calm. At first, this cloud resembles in size a grain of corn, then it is enlarged to the size of an ox's eye, then, as it advances, it spreads its dense veil over the whole hemisphere, enshrouds all around in thick darkness, and bursting out on every side, in most violent rains, winds, thunder, lightning, and even hail, it sweeps all within its vortex into one common ruin. Such as that is at sea, might be this cloud seen by *Gehazi* on land; but probably less destructive, as its rapidity might be abated by the checks it received from projections of land, from hills, mountains, &c. I myself have observed the clouds of a thunderstorm, which seemed to be of the magnitude of a few yards only; and I well remember watching a small cloud, very compact, and *solitary*, which rising in France, came across the Channel, and dissolved in a copious rain of many miles in extent, over the county of Kent.

The *sound of abundance of rain*, was perhaps, that kind of hollow whistling wind, which usually precedes a tempest:

*Interea magno misceri murmure cælum
Incipit; insequitur, commista grandine, nimbus.*

Long droughts are usually followed by abundant rains. The approach of this cloud from the sea, is every way natural and regular in Judea.

The following extracts are from VOLNEY'S remarks on the meteors of Syria, *Travels*, Vol. I. p. 352. "Thunder is known in Syria—but, in the plain of Palestine, it is extremely uncommon (*infiniment rare*) in summer, (Vide on 1 Sam. xii. 17.) and more frequent in winter; while in the mountains, on the contrary, it is more common in summer, and very seldom heard in winter: it never comes from the land side, but always from the sea. The storms which fall on Syria constantly come from the Mediterranean. These storms, in general, happen either in the evening, or morning, rarely in the middle of the day; they are accompanied with violent showers, and sometimes with hail, which, in

in an hour's time, render the country full of little lakes." All these circumstances seem to attend this rain foreseen by Elijah—it should seem to have been towards evening, for it was *after* the time of offering the evening sacrifice, verse 36. And Ahab is directed to *hasten, that the rain stop thee not*, verse 44, by forming lakes and obstructions of water, with which the country may be filled in an hour's time, says VOLNEY.

CHAPTER XIX. VERSE 4.

ELIJAH UNDER THE JUNIPER.

ELIJAH flying from the authority of Ahab, and the vengeance of Jezabel, *sat under a juniper tree*: this is the rendering of the Hebrew word *rothem*, by the Rabbins *Kimchi* and *Jarchi*. *Levi Ben Gerson* says, *broom*. The lxx. in verse 5. simply say a *plant*: in Job, xxx. 4. *wood*; in Psalm cxx. 4. *coals of the desert*, or *coals of juniper*. From these differences, it should appear, that they did not know the true tree in question. The juniper is but a bush in England; nor is it large in Germany; but in Spain, in the country between Segovia and Madrid, beams and boards are made of it, according to Clusius, (*in Hist.*); and of some kinds of juniper, the trunk is the size of a man's body.

The common juniper grows naturally in many parts of Britain upon dry commons, where it seldom rises above the height of a low shrub. Mr. Evelyn assures us, that "the juniper, though naturally of the growth of England, is very little known in many parts of the country: for it grows naturally only in dry, chalky, or sandy land; and, where the soil is opposite to this, the plant is rarely found. Those who have been used to see it in its wild state, on sandy, barren, commons, &c. will have little inducement to plant it; as there they will see it procumbent, seldom showing a tendency to aspire: but when planted in a good soil, it will rise to the height of 15 or 16 feet, and produce numerous branches from the bottom to the top forming a well-looking bushy plant. These branches are exceedingly tough, and covered with a smooth bark of a reddish colour, having a tinge of purple. The leaves are narrow, and sharp pointed, growing by threes on the branches: their upper surface has a greyish streak down the middle; but their under surface is of a fine green colour, and they garnish the shrub in great plenty. The flowers are small, and of a yellowish colour. They are succeeded by the berries, which are of a bluish colour when ripe."

"The *Phœnicia*, or Phœnician cedar, grows about 20 feet high, branching pyramidally; adorned with ternate and imbricated obtuse leaves; and diœcious flowers, succeeded by small yellowish berries. It is a native of Portugal.

"Thrushes and grouse feed on the berries, and

disseminate the seed in their dung. It is remarkable that the berries of the juniper are two years in ripening. They sometimes appear in an uncommon form; the leaves of the cup grow double the usual size, approaching, but not closing; and the three petals fit exactly close, so as to keep the air from the *tipulae juniperi* which inhabit them.—The whole plant has a strong aromatic smell. The wood when burnt emits a fragrant odour like incense. It is of a reddish colour, very hard and durable; and when large enough, is used in marquetry and veneering, and in making cups, cabinets, &c. Grass will not grow beneath juniper, but this tree itself is said to be destroyed by the meadow-oat.

"The charcoal made from this wood retains fire longer than any other, insomuch, that live embers are said to have been found among its ashes after being a year covered."

We are led now to enquire whether the *rothem*, or *retem* answers to these characters of the juniper?

Observe, 1. *The wood of the juniper is used in marquetry, and veneering*, which agrees with what is remarked by the Bride in Solomon's Song;

The beams of thy palace are cedars!

The ceiling joists are of *retem*!

meaning, the joists are veneered into a pleasing pattern (of marquetry,) by ornamental pieces of juniper-wood.

2. Its charcoal retains fire for a year. So we read Psalm, cxx. 4.

What shall be done to thee, thou false tongue?

Thou art like sharp arrows of the mighty!

Thou art like burning coals of juniper!—retemin:

meaning thou art sharp as arrows, (Vide FRAGMENT, No. cccxcxi.) and retainest thine injurious disposition as long, as vehemently, as coals of juniper retain their fire.

The juniper had the reputation antiently of being hurtful: so Virgil, Ecl. x. verses, 75, 76.:

Solet esse gravis cantantibus umbra:

Juniperi gravis umbra.

Our account above, says, *grass will not grow beneath it*.

These circumstances seem favourable to the juniper, as the *retem* of Scripture; but Job, xxx. 4. speaks of *eating its roots*; of which I find no example. Neither do I find any example of eating the roots of *broom*, which is the other rendering. What other trees occur in the deserts or uncultivated wilderness of Syria?

I observe *Hasselquist* mentions, "*frutex foliis triangularibus splendentibus*. This plant is very common in the deserts of Palestine." May such a *frutex* larger than a shrub, yet not equal to a tree, be comprehended among the class of *retem* in ancient Hebrew?

Certain junipers are often confounded with cedars, even by modern writers.

AN EXPOSITORY INDEX

TO THE SECOND BOOK OF

KINGS,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER I. VERSES 10, 12.

FIRE brought from heaven by Elijah. See on 1 Chron. xxi. 26.

CHAPTER II. VERSE 11.

ELIJAH taken to heaven in a chariot of fire. See on 1 Chron. xxi. 26.

VERSE 19.

THE WATERS HEALED BY SALT.

The men of Jericho said to Elisha—The situation of this city is pleasant, but the water is naught, and the ground barren.

The pleasantness and fertility of the district around Jericho is witnessed by *Josephus* in many places; and by *Reland* (*Palæstin.* p. 829.) Proofs of the same effects, *i. e.* barrenness, or abortion, attending other towns, not perhaps, less pleasantly situated than Jericho, may be seen in *FRAGMENT*, No. iv. to *CALMET'S Dictionary*.

What particular principle abounded in these waters to their injury we do not know; but this we may safely observe, that any quantity of salt thrown into the reservoir, or apparent issue of the waters, could only correct the offensive qualities of so much water as was then contained in it; so much as might be subjected to the action of the salt, while in the process of dissolving; but the salt, could never reach the actual source of this fountain; that we may well believe was at a distance under the earth: but even, if it had been a lake, exposed to the air, which, by channels under ground, supplied this spring, still the quantity of salt used by Elisha could never have neutralized those portions of the strata through which the water ran, year after year, [for we find it was only a dish full. Vide on Proverbs, xix. 24.]

We find Moses rendering offensive water potable by means of wood, *Exod.* xv. 23. but that water returned to its original qualities; whereas,

of this water, thus healed by Elisha by means of salt, it is remarked, that it continues salutary to this day.

We do not know what credit may be given to those who show a spring, which they call that of Elisha, at Jericho; and which is described as *rising* in an octagon bason, and watering a small wood, through which it runs, many wild plants growing on its banks.

Maundrell says "Its waters are at present received in a basin, about nine or ten paces long, and five or six broad: and from thence issuing out in good plenty, divide themselves into several small streams, dispersing their refreshment to all the field, between this and Jericho, and rendering it exceeding fruitful. Close by the fountain grows a large tree spreading into boughs over the water and here in a shade we took a collation, with the Father Guardian and about thirty or forty Fryars more, who went this journey with us."

CHAPTER III. VERSE 4.

TRIBUTE PAID IN KIND.

"IF we advert to the most ancient periods of time, and examine their manners, we shall find that the Swiss have no need to blush at dealing chiefly in cattle, milk, and cheese; nor at the title of *cow-keepers*, which was once the cause of a war between their neighbours and them. Abraham, Isaac, and Jacob, were pastors; but according to *Trogus*, lib. xxxviii. they were kings. *Job* was a king, xxix. 25; *Augias*, king of Elis, was a pastor, so are the chiefs of the Tartars to this day," and so, I believe is the king of Spain also; and famous is the wool of the royal flock. "*Mesha*, king of Moab, was a sheep-master; and paid 100,000 lambs, 100,000 rams, with the wool." This seems to be prodigious, if an annual tribute is meant, but, if it be, like some of our copyhold tenures, a fine on admission, it was paid by

by this king, only on his accession to the property and government.

The Hebrew word *mikneh*, which signifies a flock, signifies also *riches* generally, because originally riches consisted in flocks; accordingly Pliny informs us, (lib. xviii. cap. 13.) that "from the Latin word *pecus*, (a flock,) is derived *pecunia*, coin; from thence also, as appears by the registers of the censors, all the revenues of the Roman common-wealth, are called at this day *pascua* (pasturages,) because, anciently, they were such only; and even the mulcts and fines were paid in oxen and sheep." In Germany the word *geld* (money), signifies all sorts of rents, whether paid in money, corn, cheese, or fish, *i. e.* the productions of the country.

Verse 15.

THE EFFECTS OF MUSIC.

Elisha said—Bring me a minstrel; and when the minstrel played, the hand of the Lord came upon him.

We mentioned the soothing, the tranquilizing effects of music, in the instance of the hypochondriac Saul, 1 Sam. xvi. 6.; and we suppose, that much the same effect was produced in this instance of Elisha. The prophet's mind was agitated, vexed, and mortified, at what he saw around him: like the apostle Paul at Athens, "a keen edge was set on his spirit;" thus uneasy, and bewildered, he felt himself unfit for supplication to God, or for receiving communication from him. To acquire that self-collection, that self-possession, which is of the essence of devotion, the prophet has recourse to the powers of music. A sacred song by its sentiments, a sacred air by its association of ideas, recalls the wandering thought, the roving mind, and fixes them on that object, which is the most interesting to devout contemplation. We cannot suppose that the gift of prophecy was imparted by music, for then (*a fortiori*) the person who played must have received it also: but a state of solemn sedateness of mind was solicited by the prophet, as a preliminary to the advent of the prophetic spirit.

Cicero tells us, (Tusc. iv.) that "the Pythagoreans were used to tranquilize their minds, by composing their thoughts and imaginations by means of music and singing."

Whoever has felt and considered the energies of devotion, is convinced of the necessity that those energies should occupy the whole mind; which should be in a calm, settled, *quiescent* state, to allow the first risings of serious thought, no less than to encourage its full effect; and if such a person be liable to the hurry of temporal business, to the clash of opinions, or the din of arms, he will earnestly wish—when he desires to cultivate devout affec-

tions—he will earnestly wish for that composing, that tranquilizing power which accompanied the serious strains of music played before Elisha.

A word against the *abuse* of music in devotional services may not be improper: for indeed, nothing is more contradictory to reason, not to say piety, than the introduction of popular, profane, or frivolous airs in solemn and public worship; as if

*Light quirls of music, broken and uneven,
Make the soul dance upon a jig to heaven.*

What kind, what degree of devotion, what sedateness of mind can arise from an opera band playing opera airs in a (christian!) church?

Verses 16, 17.

A MIRACULOUS SUPPLY OF WATER.

The necessity, and the scarcity of water in the East, is well known to our readers;—that an army should be distressed for it, is by no means an unusual occurrence. This history of procuring it adds another to the gracious interpositions of divine power. But to understand this history properly, we must notice the direction of the prophet, *dig ditches ditches in this valley*. It was then a *valley*, where a current of water might pass, or where it might be collected: or where, on digging, it might be expected to be found. The reader may see on the Journeys of Israel, &c. in Mount Sinai, Exod. xiii. &c. the nature of the valleys in that district: and that many of them furnish water, on being dug into though to a slight depth. The word rendered valley, *nachal*, is often rendered *torrent*; it probably means the hollow, or ravine, bounded by the two banks, between which it lies.

We may imagine that *ditches*, such as were usually dug in similar places, were now dug in this valley. They were dug, it should seem, overnight, but no water was found in them then; however, the next morning, water was discovered coming from the way of Edom; and these ditches, trenches, pits, &c. being ready, received and detained the salubrious streams.

It appears, that the waters now received by the Hebrews came from Edom, a mountainous country, as we learn from Numb. xx. 22. Mal. i. 3. The fact, therefore, proves to be, that rain had fallen at a distance, during the night, and had been providentially directed to take that course among the mountains, and after quitting them, which led to the trenches cut in the valley where Israel was now encamped. . . . Our inference is, that, the prophetic impulse on the mind of Elisha, rather constitutes this miracle, than the actual fall of rain; as we have seen on other occasions, that predictions of natural *phenomena* are in their application supernatural: and that time, place, and circumstances, contribute greatly to characterize events as miraculous.

We cannot peruse Maundrell's Travels in Syria, or any accounts of torrents among mountains, without perceiving the justness of this observation.

The reader has observed the readiness with which some of these valleys yield water, when the sand is dug into, to the depth of a foot, or a foot and half. I apprehend, this may throw some light on expressions used, Numb. xxi. 18.

We find the people were gathered together to Beer [the well;] but as this well, though sufficient for ordinary supply, was not equal to the supply of the camp of Israel, God promises to increase its waters:—"then sung Israel this song:

Spring up, O well, sing ye to it:

The princes digged the well, [with the sceptre;]

The nobles of the people digged it with their staves of office.

Meaning, I suppose, that the spring was so copious, and the sands around it so easy of removal, that the heads of the tribes had only to mark out a course for it with their walking sticks, and the water followed in those channels without further trouble. This seems to be the sense of the passage, abstracted from its poetry. This is the only kind of digging which, perhaps, was requisite; or of which the tribal staff was capable.

To return to our immediate subject:—

The deception of the Moabites, who thought this water to be *blood*, was occasioned by the situation of the sun, *i. e.* by the angle of the solar rays falling on the stream: and that in which those rays were deflected to the station of their observation that morning. The reflection of the rays of the sun in water at his rising, or setting, often gives to the fluid a red appearance, which is more or less deep—*crimsoned*,—according to circumstances. The Moabites, knowing there had been no water in that valley, or torrent, the day preceding, and that no rain had fallen around their encampment during the night, concluded, much too easily, that what they saw was blood: they knew nothing of the fall of rain in the distant country of Edom; their mistake proved fatal to them.

Verses 19, 25.

The circumstance of *cutting down the trees*, is not unusual in the East: and when it is considered how greatly the sustenance of the inhabitants depends on fruit-trees, date trees for instance, it amounts almost to a prohibition of their continuing to reside in a country which had been so wasted.—It is a deprivation of a very essential article, an article which cannot be recovered without the labours, the cultivation, the delay of many years.

The following extract will shew that this conduct of Israel is not singular.

"Solyman entered Tabris—most miserably was

that poor city used by the enraged Turk, albeit no opposition was made; for, not content with plunder, *they cut down their fruit-trees, and trees for shade; spoiled all the delightful gardens; yea, levelled with the ground the king's palace, and such other houses of the nobility as might best express their malice.*" HERBERT's Travels, p. 277.

* * * The destruction of the olive trees in Spain and Portugal, during the present calamitous war in those countries, affords but too melancholy a comment on the practice mentioned in the text.

CHAPTER IV. Verse 2.

THE WIDOW'S OIL MULTIPLIED BY ELISHA.

"ALL miracles in general surpass the powers of nature; but some are greater and of a more elevated rank than others. There is, perhaps, among them an infinity of degrees, the knowledge of which is reserved to glorified spirits, and to angels. The miracle to which we are now referring, is perhaps one of the greatest mentioned in Scripture. It is almost the same as that done by the prophet Elijah at Sarepta," 1 Kings, xvii. 14.

. An astonishing miracle, performed immediately by an infinite power. Whether we suppose that a drop of liquor was multiplied into twenty others of the same size, and of the same nature; or whether the air which surrounded it, or that contained in the empty vessels, was changed into oil, without suffering those processes which are necessary in the ordinary production of oil, through the pores, the glands, or the ducts of trees, appointed and formed to that purpose. "This miracle in a word, surpasses the understanding of every philosopher;" as indeed does the series of changes which takes place, in concocting plain rain-water into the nourishment of plants, endued with all the different properties of their appropriate juices, sweet, sour, rough, smooth, &c. That power which converts water into oil by the mediation of the branch of a tree, and a system of vessels, is equally beyond the conception of the completest philosopher, as that which produces the same conversion without any such interposition. This reasoning applies no less to the immediate production, or multiplication of food in the New Testament.

Indeed, I suppose we have several instances in sacred history, that bread [or food] alone, in its ordinary state, is not restrictively the support of human life. The Manna from heaven was an extraordinary supply, though of an ordinary substance; and the conversion of a portion of air into Manna, is by no means an impossible supposition: for, had that same air passed into certain trees it might have contributed to form those exudations, of which manna consists. The oil and the meal of Elijah

Elijah, and the oil of Elisha, seem to be accretions, or prolongations not unlike in nature: a similar prolongation we have in Elisha's ordering twenty loaves of barley, and ears of corn in the husks, as food for an hundred men, 2 Kings, iv. 42. These events, together with those of the same kind, directed by our Lord, bespeak for their author a power not limited by the usual laws of nature.

VERSE 39.

And there was a dearth.—And one (of the sons of the prophets) went out into the fields to gather herbs, and found a WILD VINE, and gathered thereof, of wild gourds his lap-full, and shred them into the pot, for they knew them not.

Further information may enable us to determine more accurately than we can at present, the nature of the noxious vegetable here referred to. We observe, first, It was in a time of dearth; when herbs not usually employed as food might be resorted to by the impulse of necessity. Secondly, That the gatherer went into the common field, not a garden, or an orchard, but, as we might do in our own country, to gather nettle-tops, dent-dellion, chickweed, and other wild herbs. He found a wild vine:—the reader has seen on Deut. xxxii. 32. that the word *vine* does not always refer to a grape-vine, nor even to plants of that genus, but has a general signification; yet it should seem to refer to plants bearing berries of some kind; if so, wild gourds could hardly be the vegetable gathered, for these certainly do not resemble berries;—but if the Hebrew word rendered *vine*, (אורת, *auroth*,) may be taken as extensively as our word *bine* (*bind*,) for a creeping plant, then it may include melons, pumpkins, gourds, &c.; for we say, not only strawberry-bine but cucumber-bine; and it might be, that a person designing to gather melons, or cucumbers, should mistake a wild-gourd, or the bitter cucumber, or *coloquintida*, for a plant of that kind, though it has no resemblance to the fruit of the vine. We receive no information from the lxx. who read *τολυπην αγριαν*, *wild balls of a round form*.

Some persons have supposed that mushrooms (or at least, a plant of the fungus tribe) was here intended; we know that some of these are round; and that, though some are edible, others are dangerous, and even poisonous. According to our version, however, it appears, that the plant was not known; which gives the idea that none in the company had seen it before:—perhaps we ought to render, “it was not distinguished”—but was admitted into the mess, without being observed, or detected; there being many wild herbs gathered on this occasion, and shred together, this passed without attention. Many of our pot-herbs are naturally wild, even in our own country, and many

more grow wild in the East; even *asparagus*, which is cultivated with so much care among us, grows wild in the Crimea; and should we investigate from whence we received our vegetables, most of them would prove to be eastern plants, and to be, more or less, wild in the country where they are native.

“Elisha changed not only the bitterness of this ingredient which was offensive to the taste and the stomach, but also the venomous acrimony into aliment. I dare not deny, that the farinaceous substance directed by the prophet was capable, by its natural virtue, of tempering the effects of what rendered the mess unwholesome; as many vegetables are rendered edible through the powers of heat and cookery, though in themselves they be poisonous, (witness the *manihot* root from which the *Cassada* bread is prepared,) [and even in some degree, the potatoe;] but I think the sudden change in this pottage by means of meal simply, was an instance of that miraculous virtue which the prophet exercised on other occasions also. Many persons suppose the number of guests was an hundred.”

CHAPTER V. VERSES 14—27.

NAAMAN CURED OF HIS LEPROSY.

NAAMAN was a great man with his master, the king of Syria: but he was a LEPER.—Metjaroth.

On Lev. xiii. p. 60. the reader has seen several kinds of leprosy, and the *tjaroth* described as being of a bad kind, as being called the *Phenician*, or *Syrian leprosy*. The *Heb. tjaroth*, seems to be the parent of the Greek *psora* a scab. Herodotus, lib. i. cap. 138. mentions the *lepra* as a disease among the Persians, and calls it *leuce*, the *white scurf*; adding, “whoever among the citizens has the *leprosy*, or *white scurf*, does not enter into the city, nor keep company with the other Persians. Moreover, they say that he who is afflicted with this disease has committed some offence against the sun,” their Deity. It is likely, some notion allied to this—that the sufferer had offended the Deity, was current among the Jews: which accounts for several expressions used concerning it.

We shall make no comment on the disagreeable and dangerous situation of Naaman, who was thus infected, and no doubt, was treated accordingly, by being kept at a distance, &c. and his company guarded with proper caution, &c. notwithstanding his prowess. The letter sent from the king of Syria, the presents brought by Naaman, the mode of his cure, the difference between his first and his second visit to Elisha, his approach, and his return, are not to our purpose, as naturalists, though very fit subjects for the reader's consideration.

Not less wonderful than the cure of Naaman is the punishment of Gehazi. We formerly observed.

(on Lev. xiii.) that Miriam was struck with a leprosy of this same kind, *tjaroeth*—immediately from heaven; but she was soon relieved. Gehazi is equally struck, but struck with this disease in *perpetuity*. For the descent of this disease in families, see the passage already referred to, p. 59.

These two instances certainly give some countenance to the opinion which referred this species of leprosy to the immediate hand of heaven; and supposed that those who were afflicted with it, had offended the deity.

Abanar and *Parphar*, rivers of Damascus, are not now to be distinguished. MAUNDRELL supposes they were branches of the *Barrady*, which waters Damascus.

CHAPTER VI. VERSE 25.

AND there was a great famine in Samaria, until an ASS'S HEAD was sold for eighty pieces of silver, and the fourth part of a cab of DOVE'S DUNG for five pieces of silver.

Here are two perplexing subjects; the first is *the head of the ass*. It is true, there is no perplexity in this as read in our version; but we have already hinted that the ass was—a measure; perhaps; or, perhaps, a kind of pack, or other *quantity*, well known; or, as it is used in reference to the lading of bread, may our word *paniers*, [from the French *pain*, bread] answer the import of the term? or, was any slight package for their conveyance, like what we call *creels*, in customary use at this time, and suited to the purposes mentioned.—We have seen that Jesse sent to Saul *an ass* of bread, 1 Sam. xvi. 20. that *three asses* of bread were eaten by one person, in one day; and we may hint a doubt, whether Abigail, 1 Sam. xxv. 18. really loaded *asses*, quadrupeds, with her presents to David; for the original literally is, “she took 200 of bread, &c. and placed them on *THE asses*,” which seems to hint at something distinct from *asses*, animals: for then it would be as it is in our version, “she placed them on *asses*.” There is also a passage, Exod. viii. 14. where our translators themselves have rendered *heaps*, what in the original is *asses asses*, “they gathered the frogs together, *asses asses*,” i. e. many of that quantity, a measure, called an *ass*: so Samson says of his defeated enemies, a heap, heaps; *ass asses*. Now, if we take our English word *pile*, to signify this quantity (not meaning to attempt to determine accurately, even were it possible) it will lead us to the idea, that Jesse sent to Saul a *pile* of bread; that a person ate three *piles* of bread in one day; that Abigail placed her bread, wine, corn, raisins, and figs in *piles*; that the Egyptians gathered the stinking frogs in *piles*; that Samson's enemies lay in *piles*;—is there any thing strained or unnatural in these ren-

derings? Let this vindicate those “Jews who translate, not *the head of an ass—chamer*, but *the head of a measure—chomer*,” for the letters are precisely the same in the original. *Kimchi*, indeed, refutes this sentiment: however, *Kimchi* is not infallible. But what must we do with the *head*?—Observe, that this word *rash*, signifies the *total, entirety, the whole*, as Psalm cxxxix, 17. “How precious also are thy thoughts to me, O God! How great is the *head* [sum] of them!—the total—the entirety. Exod. xxx. 12. When thou takest the *head*—sum total, the whole enumeration of Israel. Numb. i. 2. Take the *head* [sum total] of Israel. See also, chap. iv. 2. 22. xxvi. 2. xxxi. 26.

These ideas combined, will contribute to explain the passage to this effect, “the famine was so severe that *the whole of a pile*, i. e. of bread, or a complete *pile of bread*, sold for 80 pieces of silver.”—How excessive was this price, when one glutton, as we have seen, could eat three *asses*—*piles*—of bread in a day!

It must not however be concealed that there is no mention of *bread* in the original; and therefore, as the quantity intended to be expressed by the word *pile* is, as far as we know, indeterminate; (and perhaps differs with its subject,) it may possibly, read *onwards* here to the dove's dung, in the following clause. “The whole of the quantity called *an ass*, (*viz.* of dove's dung,) was sold for 80 pieces of silver, and the fourth part of a cab of dove's dung for 5 pieces of silver.” The reader will consider the above so far as it seems to be reasonable.

The second difficulty is the *dove's dung*. The general opinion of writers since *Bochart*, takes this to signify a kind of *chich pea*, or *tare*, which has very much the appearance of dove's dung, and from thence might be so named. The reasons against the admission of the dung of doves in this instance are—its intire unfitnes for food; in fact, it could yield no nourishment:—also, the great improbability that there should be doves enough to supply any quantity of this food, disgusting as it is: for then—why not kill the doves themselves for food? We shall not repeat the different opinions which we decline to follow; but refer to 2 Sam. xvii. Nos. 7. 10, to which we shall add a few remarks. “In the Arab writers the words *kali*, and *ugnen*, signify equally the dung of pigeons, and *chich-peas*. Great quantities of *chich-peas* are sold in Cairo, to the pilgrims going to Mecca: and at Damascus, says Belon, “there are many shops where nothing else is done but preparing *chich-peas*. These peas, parched in a copper pan, and dried, are of great service to those who take long journeys.” This accounts for the stock of them stored up in the city of Samaria. In short the *cab* is a fit measure for this kind of pulse, which was the

the fare of the poorer class of people. SCHEUZER inclines, instead of pigeon's *dung*, to render pigeon's food, which consists in pulse, peas, &c. *Farragine columbina*, *κασις*; a mixture of grain, pulse, &c.

... Inde demum me
Ad porri & ciceris refero lachanisque catinum.
HOR. lib. i. Sat. 6.

Et fervens cicer, & tepens lupinus,
Parva est cœnula, quis potest negare?
MARTIAL, lib. v. Ep. 79.

CHAPTER IX. VERSE 30.

JEZABEL PAINTED HER FACE, and 'tired her head, and looked out at a window: literally, she put her eyes in paint, i.e. she drew between their lids, with a silver bodkin, the powder of rich lead ore, *stibium*, or *antimony*: in Heb. *phuk*. (Vide EYE and EYELIDS in CALMET.) In Ezek. xxiii. 40. instead of *phuk*; we read *cochal*. In Morocco, says, Stuart, the Jews call this substance *elcol*. The effect of this substance thus employed, is *πλατοφθαλμον*, to cause the eyes to appear as if separated, Pliny, lib. xxxiii. cap. 9. To enlarge the apparent magnitude of the eye, the face was deprived of part of its natural proportions, and these were bestowed on the eye, wherefore the ancients said such persons had masks, not faces: *prosopeia*, not *prosopa*.

That *antimony* was what Jezabel used, appears from the lxx. who read *estimato*, *esteibisato*, which the Vulgate renders correctly, *depinxit oculus suos stibio*: and the *stibium* of the ancients is our *antimony*. Ion, a Greek poet, in his *Omphale*, enumerates among the foreign ornaments of the queen of Lydia, *την μελαινοι σιμμιν*, called *ommatographon*; and Hesychius explains the *ypogrammata* of the women by *stimmismata*, antimonial preparations, i.e. powders for the eyes—i.e. for the eyelids.

Pollux (*Onomast.* lib. v. cap. 16.) describes a woman as tinging the interior part of the eyelids, blackening the eyebrows, and forming them into a semi-circle. Tertullian calls this manner of painting the eyes *enlarging the eyes with soot*,—*augmenting the eyes with black powder*. The manner of doing this is mentioned by many travellers into the East: as Dr. SHAW, Travels, p. 229. RUSSELL's Aleppo, p. 102. who well describes the manner of it. Xenophon (*Cyroped.* lib. i.) speaks of Astyages, king of Media, as *painting his eyes*: and Juvenal, (*Sat.* ii. line 93.) mentions the same of certain men of his time. See also Joseph. *de Bel.* lib. iv. cap. 9; Herodian, lib. v. cap. 16.

N.B. The smoke of certain kinds of fragrant gums, &c. was sometimes employed for this purpose, which is what Tertullian means by *soot*.

CHAPTER XIV. VERSE 9.

THE THISTLE that was in Lebanon, sent to the CEDAR that was in Lebanon.

The word for *thistle* in the original is *coach*. It is rendered *thorn*, Prov. xxvi. 9. Cant. ii. 2. 1 Sam. xiii. 6. *thickets*. Job, xxxi. 40. implies that it was in some respects comparable to wheat—in size, perhaps; or perhaps, it infests the wheat fields in Arabia.

CHAPTER XX. VERSES 9, 10.

THE DIAL OF AHAZ.

THIS is in SCHEUZER a very long article; in which we find a variety of opinions detailed, but none satisfactory. Referring therefore to FRAGMENT, No. ii. also to No. cclxii. appended to CALMET'S DICTIONARY of the BIBLE, for principles which seem to be the best illustration of this subject, we shall merely extract a hint or two from SCHEUZER.—It was not the *body* of the sun which retrograded, but its rays; or rather the shadow they occasioned, as the text expresses; for, when it is said, Jonah, iv. 8. that "the sun smote the head of Jonah," we do not suppose that he was smitten by the body of the sun. If *hours* be understood by the word *degrees*, this day must have been 32 hours in length; 10 which the sun had already proceeded; 10 which he returned; 10 which he regained; and 2 hours over; which 2 hours he must have advanced in his course. If *half hours* be understood by the word *degrees*, the day was 22 hours long. There are several modes of constructing dials, so that the shadow cast by the *gnomon* shall go backward at certain times of the day:—for instance, under the torrid zone, when the sun is in the arc of the ecliptic, comprised between the nearest tropic and the parallel of the place, the shadow will trace back some part of what it had advanced, once in the morning, and once in the afternoon. (Vide COSTARD'S *Astronomy*, p. 105.) But that notion though astronomically true, has no consequence in illustrating this history.

"To finish this commentary, I shall relate a phenomenon singular enough, remarked by a person named Romuald, prior of a convent at Metz. This prior with two of his monks, Lucian and Alexis, remarked on June 7, 1703, that in a sun-dial facing the east, the shadow at noon exactly retrograded from the meridian line, to that line which marked 10½ hours, and that afterwards, by little and little, it returned to the line of noon. This fact is reported by Parent, in his *Recherches Math. & Physiq.* p. 256. and by Thummig, *de Phenomena singulari solis cælo sereno pallescentis*, p. 19. who attributes

attributes this phenomenon to a refraction of the solar rays, augmented insensibly by a condensation of the atmosphere, the interstices of which were filled by heterogeneous and thickening particles."

[Perhaps a layer of *incrassated*, or *condensed* air occupying the atmosphere in the direction of the sun's rays, (which at noon, is from the equator directly north, the usual course of the heated air, flowing from the equator,) might produce this effect.]

Whoever is used to astronomical observations, knows, that what *Hooke* calls *veins of air*, i.e. layers of air of differing densities, and of dissimilar composition, often interpose between the observer and his object. As the air at different elevations is of different degrees of heat, and pursues different courses, it is very credible, that a quantity of air loaded with transparent vapours, brought from a distance, should vary the refractive powers of the atmosphere, either by its own properties, or by affecting the air below it: the sun's rays passing through this varied portion would take a new direction, and move the shadow on the dial accordingly. This refraction occurs every morning and evening in the instance of the twilight, by which we

see the *light* of the sun and the *body* of the sun, a long while in a morning *before* he really reaches that place where he seems to be; and a long while in the evening *after* he has really sunk below the horizon. This may occur at noonday, in some degree; but not to any thing like the quantity predicted on the dial of Abaz. In fact, this observation of *Romuald*, to the amount of an hour and half, is a very extraordinary incident.

We must, however, acknowledge, that as the lighter evaporations from the earth rise to great heights in the atmosphere, while the current of air heated under the line by the sun's direct beams, also rises to a great height, and the various *gasses* which are brought from different parts of the globe, are of different densities, and rise to great (but differing) heights: an assemblage of these vapours above the lower *strata* of the atmosphere, (of different densities at different times) when lying in the course of the solar rays, may refract them in a variety of manners of which we have little conception; nor indeed could we suspect such causes, or form any conjectures, not to say make any due allowances for their effects, before the doctrine and nature of *gaseous* airs was so well understood as it is now.

AN EXPOSITORY INDEX

TO THE FIRST BOOK OF

CHRONICLES,

ON SUBJECTS RELATIN GTO NATURAL SCIENCE.

CHAPTER XXI. VERSE 26.

FIRE FROM HEAVEN IN ANSWER TO WORSHIP.

AND David built there an altar unto the Lord, and offered burnt offerings and peace offerings, and called upon the Lord; and he answered him from heaven by FIRE upon the altar of burnt offering.

There are in Hebrew several words which imply fire, burning, &c. but that most commonly used is *ash*. Nevertheless, there are sundry occasions, on which the supposition of a distinction in the nature of fire, would be very acceptable. It is the property of fire to burn; yet, we read, Exod. iii. 2. that "the bush burned in the fire (*ash*), but was not consumed:"—might this fire resemble some of our *milder* electrical appearances? We read, Numb. xi. 1, 2, 3, of "a fire of the Lord, which consumed in the extremity of the camp;" might this be the *Samiel*, or fiery wind? or might it be [*vehement* electrical meteors] Lightning? These three kinds [or degrees, or distinctions] of fire are diverse from the fire, kept burning on the altar, by means

of fuel. We seem to have also different properties ascribed to fire: beside the "bush burning in the fire but not consumed:" we read, 2 Kings, vi. 17. of "chariots of fire, and horses of fire," filling a mountain; certainly these did not burn; for then they must have been rendered sensible by their destructive effects; or, if they continued unknown, they must be of a nature and property different from either Lightning, the *Samiel*, or common Fire; or is the descriptive appellation *metaphorical*? or were these appearances seen in *vision* only?

Lightning is evidently called the fire of God, Job i. 16. (and it is said to have *eaten* what it consumed.) The same, I suppose, elsewhere. Vide Exod. ix. 23.

This leads to the enquiry: what might be the natures of those fires, of which we read in several passages in Scripture? The fire of the burning bush could not be lightning, from its duration, as it lasted some time; and from its non-destructive effects. But the fire which devoured Nadab and Abihu, Lev. x. 1. may be taken for that meteor; and we observe, that the same word *devoured*, (or *eaten*) is used in this place as in Job, i. 16. Now, if

if in these places the 'fire of the Lord' was *lightning*, then it should seem that lightning was also the 'fire of the Lord,' in chap. ix. 24. for we should naturally expect the same thing to be described by the same terms in the last verse of Lev. chap. ix. and in the immediately succeeding verses of chap. x. The consequence of this suggestion is, that God consumed the gifts which were laid on his altar, by lightning, in the instance recorded, Lev. ix. 24. Moreover, it becomes a question whether in other instances, lightning was the fire of the Lord, which consumed the sacrifices on his altar?—as that of Elijah, 1 Kings, xviii. 38; and that of David in the present passage.

These are instances of the direction of lightning to a favourable, or beneficent effect. It is probable, the same meteor is directed to a contrary effect, in the deaths of Nadab and Abihu; in the destruction of the companies of fifty men, 2 Kings, i. 10, 12; in the loss of Job's property, Job, i. 16; and in the destruction of Egypt, Exod. ix. 23.

It may be asked also, whether among the beneficent effects of lightning under the description of 'fire from heaven,' may be reckoned the instant translation of Elijah from this world to a better? or, whether this fire was of the nature of the chariots of fire, and horses of fire, mentioned a little after that history? Kings, vi. 17. If the chariot of fire, and horses of fire, of Elijah, were of the same nature as the chariots of fire, and horses of fire, which surrounded Elisha, then lightning was *not* the meteor employed to translate Elijah, but one of a much milder nature, probably, approaching towards that which was manifested in the *shechinah*; and this left him at full liberty of action, and in the entire possession of his faculties, so that his communication with Elisha was uninterrupted by those alarms, or dangers, which naturally would have accompanied lightning.

We have repeatedly observed, that miraculous appearances derive much of their miraculous character from time, place, and circumstances. An earthquake is not miraculous in itself, it can be accounted for on natural principles; a storm of thunder and lightning, or lightning alone, is not miraculous in itself; but, if it appear to act in answer to the entreaties of feeble man, it demonstrates that those entreaties receive attention from a power which is superior to the ordinary course of nature; and which those phenomena implicitly obey.

When Moses foretells the swallowing up of Korah, Dathan and Abiram,—the miracle is enhanced by his prophetic prediction: when Elijah, after solemn prayers to Jehovah, obtains the witness of lightning, in answer to his prayers, exactly at the time when propriety would determine its appearance; when David, "offered burnt-offerings, &c. and called on the Lord, and he

answered him from heaven, by fire:"—though that fire be lightning, it is surely a miracle, since time, place, and circumstances, contribute to fix that character on it; if when Samuel prayed for rain in harvest—a storm of rain had happened the week before, or the week after; if when Elijah prayed for lightning, a vast display of lightning has taken place at ten or twenty miles distance, or all around on the horizon, without approaching the spot indicated; if when David called on the Lord, fire from heaven had struck any other place in the neighbourhood, as Mount Zion, for instance, without exerting any activity within the narrow limits of his altar:—these might have passed for ordinary storms; there would have been no witness in them, no *testifying* on the offered gifts; whereas, the correspondence of the answer to the request made, the precision of the effect produced, its perfect coincidence with what was desirable, and what was desired, these circumstances divest it of its ordinary nature and confer on it the superior character of an agent specially commissioned, specially directed by a power to which both nature and providence are subservient.

The apostle says, concerning Abel, Heb. xi. 4. "the Lord *testified* on his gifts;" which is understood to mean, that fire from heaven consumed the offering he had brought: as in after-ages, the same kind of *testimony* was graciously granted to Elijah, and to David. Might not man, by this means, *originally* receive the discovery and use of fire directly from heaven? Indeed, we might ask, from what quarter could man more probably receive it? How should Adam even suspect the existence of the element, or if he suspected the existence of the element, whence should he conceive of his convenience in possessing this meteor; how distinguish the substance from which he might obtain it, or how should he be aware of the property of fuel to continue material fire? Heathen testimonies also seem to speak the same language. Prometheus received fire *from heaven* to animate his man—to render him religious. Sanchoniatho tells us, the first fires were those *kindled by lightning*, and these discovered the first melted minerals. Nor let it be forgot, that lightning was esteemed by the Heathen as a token from heaven:—to say nothing of this idea in Homer, I shall only call to recollection, that when Nero was at one of his banquets a flash of lightning entered the hall—on which he exclaimed, "Jupiter himself is come to make one at our festival." It was therefore, with the utmost propriety Elijah offered *this* as the test of divinity; "the God who answereth by fire, let him be the God;" since this was a principle admitted and received by his opponents equally with himself, and since it was capable of the utmost publicity, decision, and testimony.

Moreover, if we conceive of the Sun, *Baal*, shining

ing in all his strength and lustre at this time; the object of appeal by his numerous priests and partizans; beholding as it were, all the ceremonies; beheld, and *felt* too by the people exposed to his ardors, in a sultry climate, while Jehovah, was neither seen, nor heard, nor felt, neither was he particularly the God of fire, as Baal was—then we see the advantages allowed by Elijah to the worshippers of the solar deity; and the more conspicuous victory obtained by the invisible Potentate.

CHAPTER XXVIII. VERSE 12.

MODEL OF A BUILDING.

THEN David gave to Solomon his son the PATTERN OF THE PORCH—and the PATTERN of all that he had by the spirit, of the courts of the house of the Lord, and of all the chambers round about, of the treasures of the house of God, and of the treasures of the dedicated things.

A question arises here, whether this *pattern* were a *drawing*, or a *model* of the building and its parts, on a small scale? We have formerly, on Josh. xviii. seen reason to suppose, that delineations of countries were in use more early than has been admitted: on the present instance, we rather incline to the idea, that a *model*, or lesser construction of the temple intended was prepared by David. The original word signifies, *to put together, part by part*; in fact, *to build*: and this expresses much more correctly the composition of a *model*, which is a building though a small one, than a delineation, or drawing. A *model* is a very frequent preparation for a building of magnitude, in modern art; and we, have in St. Paul's cathedral, at London, a *model* of a design for that church, composed by Sir CHRISTOPHER WREN, at the expence of 800*l*. It may well be imagined, therefore, that the temple of Solomon, which, during seven years, employed 400,000 men, was constructed after a *model*, by which its form and proportions had been fixed at previous leisure, and consideration.

We observe the parts of this edifice.

1. The PORTICO, (אֹרְלָם *aulam*.) lxx. ναός, *naos*; or rather, perhaps, προναός, *pronaos*; a covered entry, or approach, to the temple.

2. The HOUSES thereof, (בֵּיתִי, *beti*.) Say some, the houses, or sacred apartments, 1. the holy; 2. the most holy; these are properly the Temple. We may conclude that when the word *house* is used, it means the most sacred part of the temple; when the word is plural, as here, it includes both apartments. But, if this expression "the houses thereof," be referred to the portico, then it must mean apartments attached to it. And I would submit whether the word rendered *portico*, does not comprehend the whole of the external or adjunct building, within which stood the Temple, correctly so called. As this portico was the proper

place for the guard of the temple, *i.e.* those priests who had the custody of the temple, it is very likely that they were accommodated with apartments which answered the purpose of guard-rooms, &c.; and this word immediately following the portico, seems to belong to it; beside which *the house of the mercy-seat* comes with propriety, last of all, as it was the chamber farthest removed from the portico: whereas, if it be mentioned here also, it would be inserted twice.

3. The TREASURIES thereof, (גִּזְזֵי, *ganzaci*.) chambers which surrounded the temple, but without touching it, an interval being left between them; these were in number, *thirty*; 25 cubits wide, 20 cubits high. Their use was to contain various kinds of stores for the temple service.

4. The UPPER CHAMBERS, (עֲלִיּוֹת, *olit, oleat*.) We have heretofore found reason to conclude, that the *oleahs* of houses and palaces in the East, were apartments separated from the main buildings, and raised (say, at the corners usually,) somewhat above them. I suspect, therefore, that the *oleits* of this passage, are stair-cases at the ends of the portico, whereby an ascent was afforded to the upper parts of the building. This gives a different meaning from "upper chambers," taken as a range of apartments, (though such is the customary rendering of the word;) for in that case, there should be three stories of apartments, whereas, I believe, that is not usually understood to have been the fact.

5. The INNER PARLOURS thereof (חֲדָרֵי הַפְּנִימִי, *chadariu hapenimim*.) These I take to have been those chambers on the upper story, to which the stair-cases of the *oleits* conducted; they were inner chambers, inasmuch as the doors whereby they were entered, were not (like those of the chambers below) entered at once from the level of the court; nor indeed, did they admit that easy ingress and egress, which the chambers below did; but being entered from the top of the stair, at the corner of the portico, they formed, as I conjecture, *chamber beyond chamber*, to the further end of the building.

6. The PLACE OF THE MERCY-SEAT, (בֵּית הַכֹּפֶרֶת, *bit hecaphoreth*.) literally, "the house of the cofferet," or coffer; but meaning, the apartment wherein stood the ark. As we find this apartment is called a *house*, we need not hesitate in admitting the word *houses*, in No. 2. in the sense of apartments of the portico.

This passage, therefore, would read thus: *David gave Solomon the model of the whole edifice: the porch, or exterior buildings; its apartments; its store-chambers, level with the court, and opening into it; its stair-cases; and its private chambers, in the upper story: also, the apartment of the mercy-seat: and the model of all that he had in spirit; even to the courts of the house of Jehovah, and to all their galleries, or divisions, round about; and to the treasures*

of the house of God, and to the treasuries of the sacred things.

The reader will judge from this enumeration, whether a *model* is not better adapted to adjust the parts, and to convey ideas of their combinations, than any delineation could be.

CHAPTER XXIX. VERSE 2.

DAVID prepared GOLD—SILVER—BRASS—IRON—ONYX-STONES, and stones to be set, glittering stones, and of divers colours, and all manner of precious stones, and marble stones in abundance.

This passage would afford matter for a long enquiry: we will endeavour to treat it concisely.

1. **GOLD.** This gold was of Ophir, verse 4. so that we are sure Solomon was not the first prince who trafficked at Ophir: also, that David had procured this gold of Ophir by land traffic, not by navigation; for we read nothing of his ships, nor of his people being engaged in navigation.

2. **SILVER.**

3. **BRASS.** *Copper* is the native mineral: brass is a mixed metal; we must usually understand *copper*.

4. **IRON.**

5. **WOOD:** especially *cedar-wood*, and other timber; not, perhaps, in the rough state of trees, but squared, sawed, and otherwise prepared for use.

6. **ONYX-STONES:** (*abeni Shoham.*) The lxx. render "stones of Soam," or *Soom*. Theodoret renders the *Soam* of the lxx. by *Onyx*, and is followed by interpreters. The word *Onyx*, is equivocal, signifying, 1st, a precious stone, or gem, called, *onyx*, in Greek *onychion*; 2d, a marble very distinct from the nature of the former, called in Greek

onychites. Pliny mentions it, as a stone of Carmania, (lib. xxxvii. 6.) Antiquity gave both these stones this name, because of their resemblance to the nail of the fingers. The *onyx* of the High Priest's pectoral was, no doubt, the gem *onyx*; the stone prepared by David was the marble *onyx*, or rather *onychus*.

"As the eye is gratified by variety of colours and decorations, I have thought that all the marble employed in the temple was not of the same kind, nor the same colour, principally that employed in the columns, whose parts might be different, as sometimes brass was joined to marble." Instead of supposing that the columns were of different marbles, as SCHEUZER does, I would rather suppose, that various parts were ornamented after the nature of the *Mustaby*, and its fountains, Esther, chap. i. (plate;) and, perhaps, the foundations, or that part of the wall near the ground, was embellished with different stones; much like the foundation (close above the ground) of the new Jerusalem, described Rev. xxi. 9.

"With regard to the following words, says SCHEUZER, I acknowledge that I am perfectly ignorant of their meaning." We may, however, guess, that they refer to such a pattern as we have hinted at, then their meaning will be "stones for the filling up," i. e. of intervals of a pattern; stones of *phuc*, i. e. having the general appearance of black-lead, dark marble, and veined marble, with all manner of costly or valuable stones, and white marble in abundance:" rather, possibly, in great size or blocks.

Some have supposed that as the pectoral was ornamented with precious stones, so was the temple—one should hardly, however, think, that *gems* of any kind were used externally to such a building, but variegated marble may readily be admitted.

AN
EXPOSITORY INDEX
TO THE SECOND BOOK OF
CHRONICLES,
ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER XXVI. VERSE 12.

ASA'S DISEASE.

AND *Asa was diseased in his feet, until his disease was exceeding great.*

The diseases mentioned in Scripture, are described by so few symptoms, that modern physicians hardly know how to determine them. Such is the case in this instance of Asa: which commentators usually call the *gout*; of which it is characteristic, that it seizes rather the rich than the poor. The original says, (ער-למעלה, *od lemoleh*), which the lxx. render ἕως σφοδρα, ἕως αχυ, proceeding upwards, proceeding to the superior parts. If this disease then was the gout, it first attacked his feet, and afterwards rose to his stomach, &c.—SCHEUZER, however, inclines to that kind of swelling of the feet and legs which is called *œdematous*; which, gradually rising higher in the body, degenerates into the dropsy. Either of these notions of this disorder differs from that suggested in our translation.

CHAPTER XXI. VERSE 19.

JORAM'S DISEASE.

THE *Lord smote Joram in his bowels with an incurable disease, till his bowels fell out by reason of his sickness.*

As we observed of the disease of Asa, so we observe on this disease, that the symptoms related do not determine it. Some physicians suppose it to have been the *dysentery*, or evacuation of blood: others think it a *tenesmus*, or incessant solicitation to discharge the bowels, without ability so to do; and this, they imagine, at length protruded his entrails. A *fistula*, a *hernia*, the *iliac passion*, have been suggested by others.

CHAPTER XXVI. VERSES 15, 16.

MILITARY MACHINES.

AND *Uzziah prepared throughout all the host, 1. SHIELDS; 2. SPEARS; 3. HELMETS; 4. HABERGEONS; 5. BOWS; 6. SLINGS to cast stones: and he made in Jerusalem, 7. ENGINES, invented by cunning men, to be on the towers, and on the bulwarks, to shoot arrows and great stones.*

It deserves notice that this is the earliest mention on record, of a magazine of military stores. It consists of—

1. SHIELDS, *meganim*. There is no difficulty in this word.

2. SPEARS, *remachim*. This is a *thrusting* weapon of war; a spear, lance, or pike.

3. HELMETS, *cuboim*. Defenders, protectors—for the head.

4. HABERGEONS, *sherinuth*. The habergeon is a kind of coat of mail; a defensive armour for the body.

5. BOWS, *keshetuth*. This is the regular and constant rendering of the word.

6. SLINGS to cast stones, (*labeni kalsim*.) Whether these slings were to be used by one person only, or whether they were of a more powerful nature, does not appear. One might be led to think that slings of the simple kind needed little storing; but instruments to throw many stones at once, might be considerable pieces of artillery. This cannot be the meaning of the following instrument, for that is expressly said to throw *great*, not many, stones.

7. ENGINES, *chashebenuth*. This is the earliest account we have in any writer, of military *devices devised by devisers*, for the defence of fortified towns. It appears, that of these, some were to shoot arrows, and others to cast great stones. We can only refer on this subject to the *balistæ* and *catapultæ* of the Romans; and of these our knowledge

ledge is but imperfect. We might, indeed, if it were applicable, collect much from the histories of the attacks and defences of castles, &c. in former days, in our own country; but, as what we could offer must be attended with great uncertainty, we think it better to pass this article, with such a reference: for, after all our researches, the machines employed by Uzziah might be totally unlike whatever we could set before the reader.

This passage is favourable to those who attribute rather to the Orientals, than to the Greeks or Romans, the invention of arts, especially of military arts and machines. The various names given to such engines would little edify the reader. Their powers are described as very great. *Nonius* speaks of *balistæ* of 100, or 120 pounds; mean-

ing, instruments which threw stones of that weight. *Diodorus*, lib. xx. mentions a machine which threw stones of *thrice six-score pounds*; the distance to which they threw is also surprising, since they reached to three *stadia*, [perhaps even to a mile distant;] they could throw in one night 500 stones, and by day 1000. They were employed also in battle. *Tacitus*, (Hist. iii.) mentions a battalion of the enemy overthrown by a volley of great stones. These machines had no need of stores of iron, powder, sulphur, pitch, &c. but for the most part, could find much usable ammunition wherever a fort was to be attacked, or a city besieged: in which, if not in other respects, they had the advantage of our cannon, which, now have entirely superseded them.

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EXPOSITORY INDEX

TO THE BOOK OF

E Z R A,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER II. VERSE 69.

THEY gave . . . *threescore and one thousand DRAMS of gold*. These *drams* being mentioned together with 5,000 *pounds* of silver, in our version, seem to convey the idea of *weight*; whereas, in fact, these *daraconim*, *drams*, were a Median coin, struck by one of the elder *Dariuses*, and named after him *Darics*. The Scholiast on Aristophanes says, (Eccles. p. 741.) "The Stateras of gold are the Darics, so called, not from Darius, father of Xerxes, but from a more ancient king." This agrees with the older account, 1 Chron. xxix. 7. "the princes of Israel gave . . . ten thousand *drams* of gold." These then were golden *Darics*, obtained from Persia by commerce. A pretty strong hint from what part of the world gold was obtained in the days of David.

[The word rendered *pound*, of silver, is *mina*: worth 60 shekels, Ezek. xlv. 12. about 7*l*.—The later *Daric*, Persian coin, may be seen in ARMOUR, Plate II. No. 4.]

CHAPTER VIII. VERSE 27.

TWO vessels of FINE COPPER, *precious as gold*.

The *lxx.* *Vulgate*, *Castalio*, and the *Arabic*, render, "vases of shining brass;" the Syriac reads, "vases of Corinthian brass." It is more probable, however, that this brass was not from Corinth, but from Persia, or India, which Aristotle (*de Mirabilibus*) describes in these terms: "It is said that there is in India, a brass, so shining, so pure, so free from tarnish, that its colour differs nothing from that of gold. It is even said, that among the vases of Darius, there were some, respecting which the sense of smelling might determine, whether they were gold or brass." BOCHART (*Hier. Pt. II. lib. iv. cap. 16.*) is of opinion, that this brass is the *Chasmal* of Ezek. i. 27.; and the *fine brass*, of the Revelations, i. 15. ii. 18. the *electrum* of the ancients.

AN EXPOSITORY INDEX

TO THE BOOK OF

NEHEMIAH,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER II. VERSE 6.

“AND the King said to me—the queen also sitting by him.”

The reader will see (on Esther) our difficulties on the admission of Haman, as a man, into the haram of Ahasuerus: yet here we find Nehemiah admitted as cup-bearer, while the king and his consort (for the queen, as a royal personage capable of sovereignty, according to our idea of that dignity, is unknown in the East) were together. They were banquetting also, as it should appear, and reclining on a duan, or sofa; so that Nehemiah seems to have taken his opportunity, when the king was in good-humour to prefer his request: like Lord *Burleigh*, who never solicited a favour from queen Elizabeth till after she had dined. Now, if Nehemiah, though a man, was admitted to such familiarity with the king and his consort, it abates the singularity of Haman's making one at Esther's banquet; perhaps, there was some peculiarity in this respect at the Persian court: certain days, or festivals, or, &c. when this took place. Vide on Esther; *ad fin.*

CHAPTER VIII. VERSE 15:

FETCH OLIVE BRANCHES, PINE BRANCHES, MYRTLE BRANCHES, PALM BRANCHES, and branches of thick trees, to make booths.

Josephus calls the feast of tabernacles “the most holy of all.” In Lev. xxiii. 40. are mentioned, goodly trees, *branches of palm-trees, boughs of thick trees, willows of the brook.* We see, by comparing these passages, that though the general

purport of them is the same, yet the particulars differ. Nehemiah was more attentive to the spirit and the meaning of the precept, than to its strict verbal construction.

1. OLIVE BRANCHES—this has no difficulty.
2. PINE BRANCHES, literally *branches of oily, or gummy, plants.* The lxx. say *cypress.* SCHEUZER says, “the Turks call the cypress *zemim.* I should prefer the whole species called *jasmin*, on account of its verdure, its fragrance, and its flowers, which are highly esteemed. The word *jasmin*, and the *jasemin* of the Turks, resembles strongly the *shemen* of the Hebrew original here. The Persians also name this plant *semen* and *simsyk.*”

3. MYRTLE BRANCHES.
4. PALM BRANCHES.
5. *Branches of THICK TREES.* These words seem to include all handsome-looking trees capable of forming a cool recess, or of casting a salutary and grateful shadow.

In Leviticus (the institutory passage) we read:

1. BOUGHS (a different word from *branches* here) of goodly trees, (*Hedar,*) literally, *fruit of the beautiful trees.* The Targum says, the *citron, lemon, or orange tree*: the Jews still use the fruit of this tree in their public services on the feast of tabernacles, as well as at home in their houses.

2. BOUGHS (the proper word for *boughs*) of palm trees.

3. BRANCHES of trees which *intertwine each other.* But I rather think a specific kind of tree is intended. The Targum says, *myrtle*, which answers to the *hadas, myrtle*, of Nehemiah.

4. WILLOWS of the brook. From this plant the Rabbins name this festival the *feast of the willow*: probably, because this kind of tree was procured in the greatest abundance at this season.

AN
EXPOSITORY INDEX

TO THE BOOK OF

ESTHER,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

THE book of ESTHER, affords little for the remarks of a naturalist. On the subject of manners and customs, it is indeed very interesting, and very capable of elucidation; but that is not our immediate object. For the description of the palace of Ahasuerus, chap. i. verses 6, &c. vide the hints annexed to the plate.

CHAPTER II. VERSE 11.

AND Mordecai walked every day before the court of the women's house, to know how Esther did, and what should become of her.

The reader, no doubt, has often perceived, that the anxiety of Mordecai for Esther was extreme; but we cannot fully enter into the circumstance of his walking *day after day*, for a long period of time, probably, upwards of a year, without recollecting the extreme vigilance with which the harems of the East are guarded. On this subject let CHARDIN speak: "The place where the women are shut up is sacred, especially among persons of condition; and it is a crime for any person whatever to be enquiring what passes within those walls. The husband has there an absolute authority, without being obliged to give any account of his actions. And 'tis said, that there are most bloody doings in those places sometimes, and that poyson dispatches a world of people, which are thought to dye a natural death." Page 332.

"I could not learn what was done more the rest of the night; for I have already informed you how difficult it is to be informed of the transactions in those habitations that seem to be regions of another world. There are none but women that can approach within a league of it, or some black

eunuchs, with whom a man may as well converse as with so many dragons that can discover those secrets, and you may as well tear out their hearts as a syllable upon that text. *You must use a great deal of art to make them speak*; just as we tame serpents in the Indies, till they make them hiss and dance when they please." Page 54. Cor. Solyman.

"And here we must observe, that *Habas* the Second, left behind him two sons; or, at least, I never heard that he left any more, nor is it known whether he left any daughters or no. For what is done in the women's apartment is a mystery concealed even from the grandees and prime ministers. Or, if they know any thing, it is merely upon the account of some particular relation or dependance which the secret has to some peculiar affair, which, of necessity, must be imparted to their knowledge. For my part, I have spared neither pains nor cost to sift out the truth, but I could never discover any more; only, that they believed he never left any daughter behind him that lived. *A man may walk an hundred days one after another by the house where the women are, and yet know no more what is done therein, than at the farther end of Tartary.*" Page 6.

We learn from these extracts, 1st, That to enquire what passes in the haram, is a crime; 2d, That it is possible, "by a great deal art," and *weighty* reasons, no doubt, to make the black eunuchs "speak," on some occasions; 3d, That a man may walk an hundred days one after another, yet obtain no intelligence from thence; 4th, That "bloody doings" are occasionally transacted there.

I think these hints account for the conduct of Mordecai, who, 1st, *walked every day before the court*

court of the women's house, to pick up any intelligence that might chance to come within his cognizance, respecting his niece. An English reader is apt to say, "Why did not he visit her at once?" or, "to be sure, when he walked before the court, he enquired of the servants, and they told him as a matter of course:" no such thing; he walked, *day after day*, if perchance he might make some of these "dragons," in any degree, tractable. In like manner, the English reader supposes, that chap. ii. 22. when "Mordecai told Esther the queen," of the treason of the king's chamberlains, that he spoke to her *personally*: no such thing; he sent her the intelligence by intervening agents. And, when Mordecai, in the utmost distress, wished to communicate with Esther, chap. iv. 2. "he cried with a loud and bitter cry, even before the king's gate," which was the only mean left him of gaining attention from the attendants of the place: some of whom, coming out to him, returned and told Esther, who was too far off to hear him. Esther sent her own chamberlain, *Hatach*, (a confidential person, no doubt,) to enquire from Mordecai himself the cause of his lamentation: and by means of *Hatach*, messages passed between them, which agrees with what CHARDIN says, that it is possible on urgent occasions to make these officers "speak." We learn also, that there are "bloody doings," in the haram; this agrees with the remark of Mordecai, chap. iv. 13. "think not that thou shalt escape in the king's house, more than all the Jews." He certainly means that Haman would procure her death, even in the haram.

I would farther *query*, whether the whole of the transactions related in the book of Esther did not pass within the royal precincts? For though we read of the *city*—so we do of the *city* of David, which certainly was part of David's palace, vide FRAGMENT, No. cxi. p. 84. also on Canticles, No. 349. p. 87.; and if this may be admitted, then the places which appear to be mentioned in this History are, 1. the INTERIOR PAVILION, or residence of the king; the INNER COURT, chap. iv. 11.; also, 2. the HARAM, or *women's apartment*, in the inner seclusions of the palace; also, 3. the royal PALACE itself, chap. ii. 8.; also, 4. the exterior part of the palace, "*the king's gate*," where his officers assembled; also, 5. the *city*, or exterior streets of buildings outside the royal palace, but distinct from the metropolis, and certainly surrounded by a wall, which included the palace, garden, &c.

The consideration of the extent of the royal district, the power of the king in this his privacy, the caprices which some kings have practised, (of which we have many instances in Eastern travels, and not a few in Persia,) the correspondence of this history to the modes of modern times, and the *ease* which attends it, on this supposition, all these contribute to *tolerate* the query. The difficulty is, how Haman, a man, though a prime minister, was admitted into the haram? It is a singularity, to which I have hitherto met with no parallel: nothing but the desperation of Esther, chap. v. 1. renders it credible: every thing was to be risked on an occasion like this, to set aside the *unchangeable* edict of the Persian monarch!!!

The reader, however, has seen what we have said on the official freedom enjoyed by Nehemiah; and we are assured by Herodotus of two things:

First, That the Persians were great drinkers of wine, (Vol. I. p. 137. BELOE's Translation) and that when filled with wine, they deliberated on the most important affairs of state, which is what we find practised by Ahasuerus and Haman, in respect to the discussion of the question respecting the extermination of the Jews, chap. iii. 8. 15.; so, when the king had enjoyed his wine, Nehemiah presented his request.

Secondly, That the Persians did, on festival occasions, produce their women in public; for Herodotus relates a story of seven Persians being sent to *Amyntas*, a Grecian prince, who received them hospitably, and gave them a splendid entertainment: "when after the entertainment they began to drink, one of the Persians thus addressed *Amyntas*: "Prince of Macedonia, it is a custom with us Persians, whenever we have a public entertainment, to introduce our concubines and young wives."—Vol. II. p. 382. On this principle Ahasuerus gave command to bring his queen *Vashti* into the public assembly: and, whether a people who had such a custom among them, though only practised *occasionally*, might not also *occasionally* admit their confidential servants, though men, into those apartments where their wives banquetted with them, (which might be sufficiently distant and distinct from the haram itself, though included in the same pile of buildings) deserves enquiry. Customs of countries differ; and customs of the same country differ at different periods of time.

END OF THE EXPOSITORY INDEX ON THE HISTORICAL BOOKS OF SCRIPTURE.

AN
EXPOSITORY INDEX

TO THE BOOK OF

J O B,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

WE are now proceeding to a division of the sacred books, which differs by strong distinctions from those we have hitherto been considering. The former were historical, narrative, matter-of-fact relations; the following are poetical, figurative, sublime, and not to be always strictly taken as simply accurate, according to their verbal import and grammatical construction.

Poesy, though in one sense it may be said to be *true*, as founded on actual events, and attentive to the qualities and properties of natural objects, yet, in another sense, may be said to be *false*, as it does not confine itself to the mere representation of verity, when addressing its readers; but enlarges, augments, magnifies its subject, solicits the aid of imagination, presses possibilities and impossibilities into its service, and thunders into the minds of those who peruse it, such representations of actions, persons, and things, as common speech would merely whisper; the whisper of common speech would, however, have the advantage of correctness, though it might scarcely move the mind of a hearer, whereas, the thunder of poesy rouses the imagination, stimulates the attention, heats the fancy and conception, and while it produces this effect, which is its object, it little cares by what expressions, metaphors, or "glowing words," it accomplishes its purpose.

We observed somewhat of this, at the close of our remarks on Deuteronomy; and we shall find repeated occasion to warn the reader, not to forget the admitted privileges of a poet: such an one gives voice to things which have no voice: sensibility to things which are insensible; intelligence to matters incapable of receiving ideas; and purpose, design, and meaning, to what is in its nature at the furthest distance from mental intention or thought.

When the poet says, the sea *saw*, the waters *heard*, the hills *leaped*,—we know the sea has no eyes, the waters no ears, the hills neither legs nor feet. When the poet exalts the grave to a person, and describes its actions; when he says, de-

struction laughs at those it ruins, or hisses at those it vanquishes, we know that destruction is incapable of the actions attributed to it. While we perceive the poet's meaning, and even admire the vigour of his imagination, and the energy of his language, we withhold entire credence, and we abate in our judgment nearly as much as we suppose the writer has added; endeavouring to approach the truth, whether by diminishing the amplitude of his descriptions, or by employing a kind of mental counterpoise—which may effect a tolerable equilibrium between exaggerated fancy and naked fact.

These ideas, and others connected with them, must be kept in mind no less while reading the poesy of Scripture, than any other: whoever takes *literally* what the author did not mean should be literally taken, can hardly be said to do his author justice; or to receive the proper advantage, which, no doubt, he seeks, and which, perhaps, is not difficult to be found, and enjoyed by a more considerate mind.

The general conduct of the book of Job as a poem, is of the most interesting kind: it opens with a preface which describes the person, and advantageous situation of a most worthy and excellent man; [called by some a *king*: perhaps we may not be far from right in contemplating the modern *sheiks* in Arabia, as bearing considerable resemblance to this holy personage.] Then it narrates by what means he was deprived of these blessings, and reduced to distress proportionate to his former prosperity; it describes certain of his former friends as visiting him, and endeavouring to excite his repentance for some secret sins, as they suppose, committed by him; while he protests his innocence of any such guilt. After many charges and vindications between the elder, and perhaps more dignified friends of Job, and the patriarch himself, a person younger than those friends who had already spoken, then assumes the discourse; and gradually prepares the reader for an appearance of the Deity himself; who reasons on the various works of his creating hand, and the various course

course of his providence in respect to them—all of which exceed the ability, conception, or direction of the human mind:—leaving the inference, that he who thus wisely, though diversely, directs the course of nature, does equally wisely, though equally diversely, direct the ways of good men, who trust in him. I am afraid to conjecture whether there be not a dislocation in the latter part of the speech of the Deity; whether Deity ought to pause in speaking, or to continue speaking till it thinks proper to close entirely. That might be a proper enquiry for a version, the present is only an *Index*.

The book of Job is so abundant in natural history, that to notice *every* instance fully, would require volumes. We have, as we hope, steered a middle course between wholly omitting, and enlarging too considerably. Those who are acquainted with literature know, that to refrain from enlargement on a subject is often more embarrassing to a writer, than to treat it copiously. We have suffered whatever is sufficiently plain in its nature, or sufficiently explicit in our public version, or whatever has already received attention in the FRAGMENTS to CALMET, to pass with little, or no notice, and have rather introduced what *further* or *fresh* hints we suppose may be of use.

CHAPTER I. VERSE 3.

JOB's substance was 7,000 sheep, 3,000 camels, 500 yoke of oxen, 500 she-asses, and a very great household.

We have no mention here of gold, or silver; no revenues drawn from those metals; no splendid vases, no gems, precious stones, or pearls;—cattle only are enumerated, as composing the wealth of this “greatest of all the men in the East.” This is an argument for the early age of Job, who is usually placed by interpreters, between Joseph and Moses. Not that Job was ignorant of these things, since they are expressly mentioned by him, or his friends, (and even as early as Abraham, Gen. xxiii. 15.) but, that his patriarchal manners and his simple way of life, induced him to reckon his flocks and his herds as his riches.

SHE-ASSES, vide on Gen. xii. 16. *et al.*

VERSE 16.

The fire of God: i. e. lightning. Vide on 1 Chron. xxi. 26.

VERSE 19.

A great WIND from the wilderness smote the four corners of the house, and it fell.

I shall first offer the account of a *whirlwind*, as given by Mr. BRUCE. Vol. IV. p. 422.

“On the 25th, at four o'clock in the afternoon, we set out from the villages of the Nuba, intending to arrive at Basboch, where is the ferry over the Nile: but we had scarcely advanced two miles into the plain, when we were inclosed in a violent whirlwind, or what is called at sea, the water-spout. The plain was red earth, which had been plentifully moistened by a shower in the night-time.

“The unfortunate camel that had been taken by the Cohala, seemed to be nearly in the centre of its vortex. *It was lifted, and thrown down at a considerable distance, and several of its ribs broken.* Although, as far as I could guess, I was not near the centre, it whirled me off my feet, and threw me down upon my face, so as to make my nose gush out with blood. Two of the servants likewise had the same fate. It plastered us all over with mud, almost as smoothly as could have been done with a trowel. It took away my sense and breathing for an instant, and my mouth and nose were full of mud when I recovered. I guess the spere of its action to be about 200 feet. *It demolished one half of a small hut*, as if it had been cut through with a knife, and dispersed the materials all over the plain, leaving the other half standing.”

This whirlwind was *in the plain*; from what quarter it came is not mentioned. Deserts should naturally be places where these kinds of winds acquire the greatest rapidity and power. Accordingly Mr. PARKE says, (Travels in Africa, p. 135.) “*A whirlwind came from the great desert.* I have seen five or six at a time. They carry up quantities of sand to an amazing height, which resemble at a distance, so many moving pillars of smoke.” It needs no proof, that what is sufficiently powerful to raise great quantities of sand, may occasionally upset whatever stands in its way, even to the overthrow and ruin of a house.

CHAPTER II. VERSES 7, 8.

THE DISEASE OF JOB.

SO went Satan forth from the presence of the Lord, and smote Job with sore boils from the sole of his foot unto his crown. And he took him a potsherd to scrape himself withal: and he sat down among the ashes.

The whole man is but disease, said Democritus; the expression agrees especially with Job:—his former state was affluence, his present is wretchedness;—he was in perfect health, but is now reduced to universal ulceration, and to abasement on a dunghill.

The Hebrew words describe Job's disease as a grievous inflammatory ulcer; how long it might last, is unknown; some have conjectured many months;

months; others some years. The text names this disease *shechin*; which is rendered, Deut. xxviii. 27. the *botch*, or *ulcer*, of Egypt; whence we conclude that it was no new disease, no infliction of a disorder, *sui generis*, now first directed to the sons of men. Neither can we determine the kind of ulcer, whether it were one or more large ulcers, spreading over a considerable surface, or many small ones, standing close together.

It is not certain, that by ascertaining the diseases at present extant in Egypt, we can fix on one of them as being that commissioned to manifest the patience of Job. If any thing had been said of its duration, *that* might have directed our enquiries. The first that seems to be likely, is our infectious disease, the small-pox, which is capable of forming a cohesion almost all over the person, of matter which may well be called ulcerated; each of these ulcers is indeed itself small, but all together form nearly one mass, extending from head to foot. This disease we know to be of a certain duration; after which, the ulcers fall off, and the flesh heals, in a manner not unlike that described, chap. xxxiii. 26.

Nevertheless, it must be acknowledged, that there is no proof that the *shechin* of Egypt was the small-pox; and it has usually been thought that Job's disorder was the *elephantiasis*, of which Celsus speaks thus, lib. iii. cap. 23. "The whole body is attacked to such a degree that even the bones are injured. The upper part of the body is wholly covered with blotches and tumours, whose redness gradually becomes black. The skin is unequally thick or thin, soft or hard, and is covered with a kind of scales. The body becomes emaciated; the face, the legs, and the feet swell. When the disorder has long continued, the toes and the fingers are entirely hid by the swelling. A slow fever comes on, which easily consumes a subject overwhelmed by so many miseries."

Against this, it may be said, that Job's distresses were only intended to be of *temporary* duration, for the trial of his virtue, during a limited time; are we then *obliged* to consider his disorder as one absolutely incurable? (for such is the *elephantiasis*.)

Many have supposed that a long-continued ulcer was the disease of Job; and SCHEUZER refers to Aretæus, lib. i. cap. 9. *De Caus. Sign. Acut. Morb.* for the description of a disease of this nature, which indeed is very terrible. However, there is no certainty that this was the disease inflicted on the suffering patriarch; and therefore, we forbear extracting so lamentable a description.

CHAPTER IV. VERSES 10, 11.

"THE roaring of the LION, and the voice of the FIERCE LION, and the teeth of the YOUNG LIONS are broken. The OLD LION perish-

eth for lack of prey, and the STOUT LION's whelps are scattered abroad."

We have here *four* different words significative of a lion.

1. ARIAH, a lion; probably of the common kind, but of full strength. Vide Gen. xlix. 11.

2. SHACHAL; this it is presumed is the black lion, mentioned by Oppian, (*Venat.* lib. iii.) "His face and mane are terrible. He is of a blackish colour, inclining to reddish brown." The same author says, he had seen lions from Ethiopia, "black, and having very beautiful manes." *Eliau* mentions similar lions in India; and *Pliny*, in Syria, lib. viii. cap. 17. The *lxx.* render *lioness*.

3. CEPHIR; a strong young lion, rising in full vigour, as appears from Ezek. xix. 2, 3.; "the lioness has brought up one of her whelps; it became a *cephir*,—a young lion,—it learned to catch the prey, it devoured men." Horace describes such a young lion, lib. iv. Ode 4.

4. LAISH. Interpreters have thought this to be an *old* lion, even decrepid; but we should rather think on the contrary, with *Bochart*, that it means a *stout* lion: and is a climax rising on the former kinds: a *ferocious* lion, seems rather to be the character required in this place.

5. STOUT LION's whelps: literally, "sons of the Labiah:" for which, see Gen. xlix. 12.

VERSE 19.

*How much less in them who dwell in houses of clay,
Whose foundation is in the dust;
Which are crushed before the MOTH.*

The Hebrew *osh*, is employed to describe the *moth*, in other passages of this poem, as chap. xiii. 28. xxvii. 18. and elsewhere. This creature is usually taken for the moth which consumes clothes and wool, by reducing them to a dust and powder. But perhaps this is more properly a *moth worm*, (for the moth itself is called *ses*, and is joined with *osh*, Isaiah, li. 8.)—this *moth-worm* is one state of the creature, which first is enclosed in an egg, whence it issues a worm; after a time it quits this worm state to assume that of the complete insect or moth.

It cannot be, then, to a moth flying against a house and oversetting it, (as Mr. HERVEY conjectured) that this comparison is intended; but to the gradual consumption of the dwelling of the worm by its erosion; *q. d.* "as the habitation of a worm is consumed by its inhabitant, so is the person of man: it is no more capable of resisting disease than a woollen cloth is capable of resisting decay, when devoured and demolished by the worm appointed to it:"—otherwise, "crushed as a feeble and contemptible insect is crushed:—as we crush a moth-worm, without compunction or reluctance." The reader will accept the following extracts from NIEBUHR, in reference to the sense of this passage, that "man is crushed by so feeble a thing as a worm."

S

"A disease

"A disease very common in Yemen, is the attack of the Guinea-worm, or the *vena medinensis*, as it is called by the physicians of Europe. This disease is supposed to be occasioned by the use of the putrid waters, which the people are obliged to drink in several parts of Yemen; and for this reason, the Arabians always pass water, with the nature of which they are unacquainted, through a linen cloth before drinking it. Where one unfortunately swallows any of the eggs of this insect, no immediate consequence follows; but, after a considerable time, the worm begins to shew itself through the skin. Our physician, Mr. Cramer, was, within a few days of his death, attacked by five of these worms at once, although this was more than five months after we had left Arabia. In the isle of *Karek*, I saw a French officer named *Le Page*, who, after a long and difficult journey performed on foot, and in an Indian dress, between Pondicherry and Surat, through the heart of India, was busily extracting a worm out of his body. He supposed that he had got it by drinking bad water in the country of the Marattas.

"This disorder is not dangerous, if the person affected can extract the worm without breaking it. With this view it is rolled on a small bit of wood, as it comes out of the skin. It is slender as a thread, and two or three feet long. It gives no pain as it makes its way out of the body, unless what may be occasioned by the care which must be taken of it for some weeks. If unluckily it be broken, it then returns into the body, and the most disagreeable consequences ensue,—palsy, a gangrene, and sometimes death."

CHAPTER V. VERSE 5.

WHOSE harvest the hungry taketh even out of the THORNS.

This word for thorns, *tjenan*, occurs but seldom; as in Numb. xxxiv. 55. Josh. xxiii. 13. and here. It seems, from its application, to describe a bad kind of thorn.—"The nations shall be thorns in your sides—in your eyes:"—perhaps, in this place, it may mean a hedge of thorns, which surrounds, for security, a threshing-floor, granary, &c. Can this *tjenan* be the *kantuffa* of BRUCE?

CHAPTER VI. VERSE 4.

THE arrows of the Almighty....The POISON whereof drinketh up my spirit.

See on Deut. xxxii. 33. Plate.

Add to these remarks; that the Chaldee paraphrast on Psalm lxiv. 4. alludes to this practice; for what is in the Hebrew, "they bend their bows to shoot their arrows," he renders, "they anoint their arrows with poison."

VERSE 5.

The WILD ASS. See on chap. xxxix. the Plate.

CHAPTER VII. VERSE 12.

AM I a SEA, or a WHALE, that thou settest a watch over me?

This sea, Mr. SCOTT supposes to be the Nile, which, when it overflows, is watched with considerable anxiety: for, should it greatly overflow, that year would be marked with desolation. The Nile is called a sea, Isaiah xxvii. 1. Ezek. xxxii. 2. It is, says Michaelis, called a sea in the Koran, Sun. vii. 12. xx. 39. xxviii. 6. We know that the daily increase of the Nile is made the subject of a kind of proclamation at Cairo, and that, should it be more or less than so many cubits, it would create a public alarm. When it overspreads its proper limits, it does great damage, by carrying away large portions of its banks, sometimes towns, or villages. "Am I an inundation, that thou settest a watch about me?"

A WHALE, *tanin*. Vide on Lam. iv. Plate. Probably the creature here intended is the crocodile; which is watched wherever its haunts are known, as there have been melancholy instances of its seizing dogs, cattle, and even women, who, going to draw water, have ventured too much into the river. In such cases, no doubt, but the adjacent inhabitants would watch with great anxiety the motions of so terrible a neighbour. "Am I a crocodile that thou settest a watch for me?"

CHAPTER VIII. VERSES 11, 12.

CAN the RUSH grow up without mire? can the FLAG grow without water? while it is yet in its greenness, and not cut down, it withereth before any other herb.

1. GOMA, the rush, is in all probability the papyrus, which having been anciently manufactured for the purpose of writing on, has given name to our paper. It grows in marshy grounds: formerly in great plenty in the canals of the Nile, where it is now scarce; but according to Mr. BRUCE, it abounds in the waters of Abyssinia. He has given an account of it, with a Plate.

2. THE FLAG. After alluding to our bull-rush, which we know grows in water, Mr. PARKHURST suspects that *Hasselquist* has described the plant designed by the Hebrew word *achu*, a sort of reed growing near the Nile, "having scarcely any branches, but numerous leaves, which are narrow, smooth, channelled on the upper surface; and the plant about eleven feet high. The Egyptians make ropes of the leaves. They lay them in water like hemp, and then make good and strong cables of them." It should, however, be observed, that the lxx. in this passage render *butomus*, which *Hesychius* explains as "a plant on which cattle are fed, like to grass:" and *Suidas*, as "a plant like to a reed, on which oxen feed."

These

These explanations are remarkable, because we read Gen. xli. 2. that the fat kine of Pharaoh *fed in a meadow*, says our translation; but literally, they *fed on achu*; meaning the same plant as in our text is said to love water.

This leads us to wish for information on what aquatic plants the Egyptian cattle feed—which, no doubt, would lead us to the *achu* of these passages.

CHAPTER IX. VERSE 9.

ARCTURUS, ORION, PLEIADES, and the CHAMBERS OF THE SOUTH.

We have a parallel passage, Amos, v. 8. "who maketh the seven stars, *Chimah*, and Orion, *Cesil*," but the order of the words in the present passage, is

1. OSH, or *Aish*: Charles's wain.
2. CESIL: Sirius, the Dog-star.
3. CHIMAH: the Pleiades, seven stars, or Hen and Chicken.
4. CHEDERI TEMAN. *The Southern*—inclosures—the companies of *chambers*—or associations—i. e. constellations.

As there is much obscurity (and no wonder) on this recondite subject, I shall first offer what *Costard* observes on Scripture Constellations: Astron. p. 49.

"*Aish*, עֵשׂ, mentioned twice in the book of Job, signifies nothing more than a *cluster*: and therefore seems to be the same constellation with the *Pleiades* of the Greeks. And as it is described *along with its sons*, these may mean the rest of the stars attending, or following them; for the year began, in those early times, with the *heliacal rising* of the *Pleiades*.

"*Chesilim*, כְּסִילִים, mentioned *Isaiah*, xliii. 10. And as that chapter contains a prophecy against Babylon, it is not unlikely that the constellation itself is Babylonian: and as the word is plural, it seems, for reasons too long to enlarge on here, to mean the constellations now called the *Great* and *Little Bear*.

Whether the Greeks borrowed the constellation called the *Great Bear* from some other people, or formed it themselves, is uncertain. But hearing that constellation called by some other people *Chalista*, a word much of the same import with *Chesil*, and knowing that *Lycaon* had a daughter called *Calisto*, they took occasion to coin the fancy that she was turned into the constellation called the *Bear*. [Vide *Asiatic Researches*.]

"כִּמָּה, *Chimah* mentioned both in *Amos*, and the book of *Job*, is nothing more than an *armed man*, and therefore, naturally directs us to the constellation *Orion*, a very old one among the Greeks, as beautifully described by *Germanicus* under the same image,

*At contra nullo defectus lumine, totus
Orion humeris splendebit, magna; divi
Vagina, & claro cælatus Balteus igni.*

"חֲדָרֵי תִּמָּן, *Hadri-teiman*, the *private chambers of the south*, Job, ix. seem to mean no constellations in particular, but to comprehend all the stars lying towards the south pole, and invisible in the latitude of Babylon, or wherever the book of Job was composed.

"נָחֵשׁ בָּרִיחַ, *Nahash-barik*, or the *Long Serpent*, in the book of *Job*, seems to denote some constellation or other; but whether the constellation *Draco* be intended, is hard to say. It is certain, however, that observations were made upon this by the ancients, for the purpose of *husbandry*, as well as of *sailing*, as appears from *Virgil*:

Hædorumq; dies servandi & lucidus anguis.

"מִזְרוֹת, *Mazaroth*, seems to have been a *broad Circle*, comprehending all such stars as lie in the way of the sun and moon. And as different parts of this circle rise *heliacally* at different seasons of the year, we may easily comprehend what is meant, Job. xxxviii. 32. by "*bringeth forth Mazaroth in its season*."

"מִזְלוֹת, *Mazaloth*, mentioned *2 Kings* xxiii. 5. may very probably be the *Menázil al kamer* of the *Arabians* or the *Mansions of the Moon*."

Such are the remarks of *Costard*.

NIEBUHR, p. 101. Fr. Edit. gives the following account of the present names of stars among the *Arabs*, which seem to have relation to those of Scripture. The *Arabs* have no names in their language related to those *Hebrew* names which occur, Job, ix. 9. yet, "some of the *Arabs*," says he "calls the *Great Bear* *Ash*, *Násh*, or *Benat Násh*: the *Pleiades* they call *Torije*; the *Belt of Orion*, *Misán*—the *Balance*. The *Pole-star* is called *Kuttub*, by some; by others *Dsjudde*: the *Via Lactea* (milkey way) they call *Derb el Tubbeie*—the way of the carriers of cut straw [who are supposed to have let some fall in passing, whence this part of the heavens is strewed with stars.]

"I addressed myself on this subject to the *Jewish astrologers* at *Cairo*; but each of them gave me a different answer.—A *Jew*, a *Sand*, who professed astrology, called an assembly, wherein he and his learned brethren consulted on the names in question. At the close of which he gave me the following answer: "*Ash*, signifies the *Arab* constellation *Om-en-Násh*. The *Arabs* call the *Cimah*, (*Kimeh*) *Torije*; and the *Cesil*, (*Ksíl*) *Shejl*. *Hadret temán* signifies the southern exposure." I afterwards was acquainted at *Bagdad* with a man reported among the *Jews* as a great astrologer: he called *Ash* the four greater stars of the constellation, *Násh*. *Ash*, then, signifies the *Great Bear* (*Ursa Major*) which is often called a chariot, [Charles's wain: or rather, if we consider what has been said above, the four great stars, or wheels of the wain, or waggon.] *Cimeh* signifies the *Pleiades*, which

which also is called in Germany, "the clucking hen," [or the seven stars.] *Cesil* is *Sirius*, or the Great Dog-star."

"In the tables of *Ulugh Bey*, published by *Hyde*, the stars $\alpha \beta \gamma \delta$, of the Great Bear, are called *el Nash*; and the stars $\epsilon \zeta \eta$, *el Benáth*. Rabbi *Aben Ezra* also says, "*Ash* is the waggon, which is also called the Bear, and is near to the north pole." He also says, "the ancients have assured us, that the seven small stars at the tail of the Ram compose the *Cima*." Rabbi *Isaac Israel*, says in express terms, "*Chima* is the Arabian *Thuraija*—the Pleiades."

"It is most likely that the Arabs understood by *Shejl*, or *Soheil*, principally *Sirius*, the Dog-star; as I was assured by the two astronomers of Cairo and Aleppo, and by the inhabitants of the Persian Gulph. What *Phiruzabadius*, *De Heliaco Ortu Soheili*, says, p. 78. that at the rising of the *Soheil* the fruits ripen and the great heats are over, agrees with these remarks."

I think, on the whole, that probability is on the side of *NIEBUHR*: nevertheless, observe, the lxx. call *Ash*, or as it is spelled, chap. xxxviii. 32. *Aish*, the Pleiades: but the most part, says *SCHEUZER*, are for the Pole-star. That the course of the stars influenced the seasons, in the opinion of the ancients, is well known; whence *Pliny* says, lib. ii. cap. 39. "Arcturus seldom rises without bringing hail, and tempests;" and lib. xviii. cap. 28. "the evils which the heavens send us are of two kinds; that is to say, tempests which produce hail, storms, and other like things, which is called *Vis Major*, and which are caused, as I have often said, by dreadful stars, such as Arcturus, Orion, and the Kids." The ancients, however, were mistaken in this notion, for the rising, &c. of these stars only marked that time of the year when such things might naturally be expected.

The lxx. render *Cesil*, by *Hesperus*, (which is now the name of the Evening-star—i. e. the planet Venus.)

The lxx. render *Cimah* by *Arcturus*, which according to modern astronomers is a star of the first magnitude in the lower parts of Bootes (*Arctophylax*); very near the *Bear's tail*.

It remains that we notice the situations and bearings of these stars. *Ash* is the north, (say the north-pole-star, for the present): *Chaderi-te-man*, is the southern constellations; *Cesil* and *Cimah*, therefore, should be stars placed in equinoctial points, (such is the opinion of *Aben Ezra*) one to the east, the other to the west. If it were possible to determine this question, we might at the same time determine the antiquity of the book of Job: because, the revolution of the heavens at the rate of one degree (or whatever be the rate, correctly determined,) in a century, calculated backward, till these stars became those of the equinoctial points, would give the date of this observation, as it stood in the days of the writer of

this poem: [or, rather, perhaps, of his principal personage, Job.]

CHAPTER XI. VERSE 12.

WHO removeth the Mountains—overturneth them—shaketh the Earth out of her place.

This is evidently a description of an earthquake. During the terrible earthquake at Jamaica, 1692, the mountains were split, they opened, they closed again, they leaped, they fell in heaps. The same prodigious motions attended the earthquakes, during an eruption of Vesuvius. *Phil. Trans.* 1783.

Who commandeth the Sun, and it riseth not; and sealeth up the Stars. This may refer to that thickness of the atmosphere, which occasionally precedes, or accompanies an earthquake. Of this we have many instances. Vide *Phil. Trans.* 1783.

CHAPTER X. VERSE 16.

SEE thou mine affliction: for it increaseth: thou huntest me as a fierce lion; and again thou shewest thyself marvellous upon me.

I would query, whether this be the true import of the passage? May it not rather refer to the action of the lion, which, when chasing his prey, hunts it at every turn, and if it have escaped, again assaults it, literally "and is multiplied as a lion my hunting: and thou turnest again to hunt me: thou shewest how very agile thou canst be in pursuit—thy marvellous things, in my instance." Perhaps, here may be some various reading, [*nepal* for *tepal*, as in 2 Sam. xx. 8.] implying, "thouallest rapidly upon me." But Mr. SCOTT thinks the lion in this allusion is surrounded by hunters, who throw their spears at him from all sides.

CHAPTER XI. VERSE 12.

THE WILD ASS. See on chap. xxxix. 5. with the Plate,

CHAPTER XIV. VERSE 11.

THE waters fail from the SEA, the FLOOD decayeth and drieth up.

Vide on Exod. xiii. &c. p. 6. No. 4.

I would query also, whether the word *iam*, rendered *sea*, does not mean an inland lake, such being frequently its import: then the idea would be, "as the waters of a lake are evaporated to dryness, and as a torrent, which appears only at times, but is exhausted by the heat of the sun, so man is entirely exhausted: he disappears totally, when he dies." This appears to be a probable view of the passage

CHAP.

CHAPTER XX. VERSE 14.

HIS meat becomes the *gall of asps* within him; literally the "bitternesses of *petenim*."

The *peten* is very probably the serpent called *asp*: by Ixx. *aspic*. Elian, lib. ix. cap. 61. says, "Their poison is extremely subtil, and extends its effects very rapidly over the whole body." Hence the proverb "bite of an asp," to express an incurable wound. Aristotle, Hist. lib. viii. cap. 29. Pliny, lib. viii. cap. 23.

With this verse is connected verse 16, where we read:

*He shall suck the poison of asps—petenim.
The viper's tongue shall slay him.*

The viper (*apoeh*) has been variously rendered—but it should seem to be either from a root signifying to *puff up*—as a viper *puffs up itself*; or *blowing*, as a viper hisses: or from another root signifying *heat*: whence Rabbi Solomon renders, "the burning serpent," or *dipsas*: but the viper is thought preferable; which the Arabs call *ef-â*, *ef-æew* and the Persians *mâ-ri-ef-y*; by Avicenna *al-aphai*; by Abenbitar *ephe*; which names are very near to the Hebrew word.

Mr. Jackson in his "Account of the Empire of Morocco," London 1809. p. 58. says, "*El-Effah* is the name of a serpent remarkable for a quick and penetrating poison; it is about two feet long and as thick as a man's arm, beautifully spotted with yellow and brown, and sprinkled over with blackish specks, similar to the horn-nosed snake. These mortal enemies to mankind are collected by the Aisawie [charmners of serpents] in a desert of Suse, where their holes are so numerous that it is difficult for a horse to pass over them without stumbling." Compare on Gen. xlix. 17.

The figure given by Mr. Jackson, corresponds very closely with that of the horn-nosed snake, of which we have given the head, on Gen. xlix. 17. Plate. fig. 5.

VERSE 28.

The increase of his house shall depart; and his goods shall flow away in the day of his wrath.

The words *and his goods* are an insertion: perhaps we might read with greater force of language, "the increase of his house shall roll away: like flowing waves—torrents, cataracts, in the day of his wrath:" i. e. of God's wrath upon him: perhaps, more properly, though less strictly, "in the day of his sufferings"—i. e. of the criminal's punishment.

CHAPTER XXI. VERSE 21.

... THE number of his months is cut off in the midst. (*Chetjetju*, צחצח,) An allusion, says Cocceius, to the ancient way of computing by pebbles, *chetjetj*; or by arrows, *chetj*. [*Abacus*?] It should rather, therefore, appear to signify "the number of his months is *computed* and *fulfilled*."

CHAPTER XIII. VERSES, 8, 9.

*I go FORWARD—but he is not there;
BACKWARD—but I cannot perceive him:
On the LEFT HAND—I cannot behold him;
On the RIGHT HAND—he hideth himself.*

THIS is a clear allusion to the cardinal points of the heavens, and is taken from the position of a man at sun-rise looking towards that glorious object. q. d. "I go forward—to the east; or backward—to the west; on the left hand—to the north; on the right hand—to the south." These remarks are drawn from nature: and they seem to be instances of the primitive manner of describing occurrences, situations, &c. by reference to the human body; many such remain among us, but not to be distinguished without diligent attention.

CHAPTER XXVI. VERSE 5.

DEAD things are formed under the waters, and the inhabitants thereof;—literally, "the *Re-phaim*, in openings under the waters and the inhabitants thereof: Hades also, is naked before him. and destruction has no covering." Meaning, as I conjecture, that the deluge swept down with its waters into the abyss to which it returned, those who had been the inhabitants of the earth before the flood, but were now destroyed by drowning: those abysses, deep as they are, the unseen world, destruction, &c. are all open to the inspection of Deity.

* * Human fossil bones are extremely rare.

CHAPTER XXVIII. VERSES 6, 7, 8.

THE stones of it are the place of SAPPHIRES: and it hath dust of gold.

There is a path which no fowl knoweth, and which the vulture's eye hath not seen:

The lion's whelps have not trodden it, nor the fierce lion passed by it.

The Hebrew word *saphir*, is rendered by the precious stone *sapphire*, with considerable certainty.

"A path

"A path not known to a bird of prey, (oith עֵץ,) nor hath the eye of the vulture seen it." The vulture, we said on Lev. xi. 13. was written *daiah*, and *daithah*: the bird here mentioned is written *aiah*. I suspect that this is a generic name for the whole of the falcon genus; and that it is varied, to signify the vulture particularly, from *aiah* to *daiah*.

The following verse seems unhappily rendered, "The lion's whelps have not trodden it, nor the fierce lion passed by it;" literally, "the sons of height"—this phrase occurs also, chap. xli. 34. and seems to denote animals whose bulk and prowess is their security: say, for example, the Elephant, which roams the forest; the Hippopotamos, which ranges in the rivers; the Rhinoceros, which wanders amid the stagnant waters: these, powerful as they are, have not seen this path: neither has the *shachal*, or black lion, which in the sandy desert, prowls for prey. These ideas keep clear of the impropriety of supposing that the whelps of the lionness are accustomed to straggle so far from their mother, that they could be imagined to discover a path unknown to high-flying birds; unknown to their mother herself.

VERSE 18.

NO mention shall be made of CORAL—(*ramoth*, רָמֹת,) or of PEARLS, (*gabish*, גַּבִּישׁ,) for the price of wisdom is far above rubies—(*peninim*.)

Of the three articles here mentioned, I take for granted, that the word *peninim*, rendered *rubies*, signifies *pearls*: this has been supported not only by the sentiments of the major part of interpreters, but by Mr. BRUCE. Trav. Vol. V. p.

Gabish, the second word, is very uncertain in signification: this word signifies "hail"—large hail stones: and when applied to precious stones, should seem to refer to a kind resembling hail, in form, or in clearness, or in both: this leads rather to *chrystal*, than to any other; accordingly, the lxx. so render it. SCHEUZER says, he should prefer the *diamond*: which, perhaps, would be right, if the diamond were known so early; but, that is strongly doubted.

The first word, *ramuth*, is generally rendered *coral*; which, if *Pliny* be correct, was highly esteemed antiently, lib. xxxii. cap. 2. "The Indians value coral, as highly as we value pearls, which come from India. The men esteem these gems, as our women do Indian pearls. Their priests and predictors, attribute to it even something sacred, and affirm that it has the virtue of protecting from dangers those who carry it. So that two things contribute to render it valuable, superstition and beauty." Experience confirms this relation of *Pliny*: for often in that country a collar of coral sells for a price equal to one of pearls.

VERSE 19.

The topaz of Ethiopia shall not equal it, neither shall it be valued with pure gold.

TOPAZ. *Pithdah* of Cush. There being seve-

ral countries known by the name of *Cush*, to determine this stone we must first determine the country. I very strongly suspect that the original seat of the Cushites was not far westward of the spot marked for the situation of Paradise, according to Major WILFORD, (Vide the map.) The reasons for this opinion are too long for this place; but as we know of at least three countries named *Cush*, the properties of the first of these (Vide CUSH I. in CALMET,) seem very strongly to describe a country near mount Caucasus. If this may be admitted, perhaps the *pithdah* is the *lapis lazuli*: but Major WILFORD says, "This country abounds with divers sorts of precious stones," &c. Vide p. 3 Enquiries on Paradise, Gen. ii. 8. among the Plates.

CHAPTER XXX. VERSE 4.

WHO cut up MALLOWS by the roots, and JUNIPER-ROOTS for their meat.

The roots of the *retemim*, we observed, if that plant were the juniper, are not, so far as we know, used, or usable, for food. It is certain, however, that in Italy, the stem of the great thistle is eaten as food; and in France, the stem, i. e. the inner part of the stem of the Spanish thistle, makes or did make, a part of food at some great tables. Some plant, whose stem in like manner is eatable, is certainly intended here: but of what species we are completely ignorant. N. B. The berries of the juniper are used as food in Lapland; and in other countries, to flavour drinks.

The MALLOW. Very great difficulties are started on this word: the major part of interpreters rather differ from the mallow. The article in SCHEUZER is very long, but on the whole, it should seem to be,—a herb of a *saltish* taste: the Hebrew name, the Syriac name, and the Greek name, all refer to this character of *saltiness*. It grows in salt places, whether near the sea, or in the Desert. Atheneus says, *it is the food of the miserable*. It seems to bear some resemblance to *kali*, or the *barilla* plant. It should seem that only the tips of it are eaten. We have in our own country one or two plants of a like nature. On some of our shores a sea-weed is gathered, and the more succulent or plumper parts of it are roasted; in which state it is recommended [in Scotland] for the cure of consumption. We have also the *Samphire*, which is a salt plant, gathered from the rocks; it is eaten in several states. The Greek *halimus*, which answers to the Hebrew *malluach*, grows, says Hesychius, *in dry and desert places*; according to Antiphanes, *in clefts and openings of the earth*. Serapion says, that at Bagdad quantities of this herb are hawked about; those who carry it cry *molochia*, *molochia*, which is nearly the Hebrew word. Job says, the *malluach* is *cropped on the shrub*; which is what the Arab writers say of

of their *malluch*. *Belon* says it grows in Crete, and in Egypt; as it does in the river Tagus, and elsewhere in Europe.

VERSE 7.

Under the NETTLES they were gathered together.

The *Nettle* is a plant so low, that no vagabonds whatever can assemble *under* it; the Vulgate always renders, *brier, bramble*, or, &c.; and SCHEUZER says, we must absolutely have recourse to tall shrubs which are thorny, prickly, and burning. He inclines to the white thorn; but it remains to be determined, whether the white-thorn grows in Arabia, in the Deserts. Dr. SHAW says, "There is no great variety of plants to be met with in these deserts. Those *acacias, azarolas, tamarisks, oleanders, laureolas, apocynums*, and a few other plants which I have seen, are generally indebted to the clift of some barren rock, or to the sandy plain, for their support, and to the nightly dews for their nourishment." He mentions many kinds of marine plants; but all growing under water.

VERSE 29.

I am a brother to DRAGONS, and a companion to OWLS.

A strange association surely! we have already remarked, that the word rendered *owl* by our translators is properly the *ostrich*;—described here as "the daughter of screaming." The word rendered *dragon*, is considered on Lam. iv. 3. Plate.

The idea of the passage is, "I am like to wild creatures; 1st, to the *tanim* or *phocæ*, which frequent the inhospitable shores of the sea, and are notorious for mourning and *whining*, (page 3.) and 2d, to the *ostrich* of the desert, whose mourning and lamenting is oftentimes of long continuance. Vide Micah i. 8. where the same creatures are associated. In regard to the *ostrich* remark, that "during the lonesome part of the night," says Dr. SHAW, "they often make very doleful and hideous noises. *I have often heard them groan as if they were in the greatest agonies.*"

There can be no stronger instance of the necessity for acquaintance with natural history, in interpreting Scripture than this passage: *both* creatures being misunderstood in our version.

CHAPTER XXXVI. VERSES 30—33.

BEHOLD, he spreadeth his light upon it, and covereth the bottom of the sea.

For by them judgeth he the people; he giveth meat in abundance.

With clouds he covereth the light; and commandeth it not to shine by the cloud that cometh betwixt.

The noise thereof sheweth concerning it, the cattle also concerning the vapour.

These verses are so obscure, says SCHEUZER, that only the interpretations of critics can be more obscure. Montanus is extremely unintelligible;

the lxx, equally so: their lections the same. *Cocceius* comments on Job—it might be wished Job himself would come and comment on *Cocceius*? The general sentiment of this divine, is, that "God orders the thunder not to strike the pious, neither his cattle, nor his vegetables." *Diodati* renders, "He hides the flame in the hollow of his hands, and orders it on whom it shall strike. He declares to it his will, whether it ought to strike cattle, or plants of the ground." I rather incline with Mr. SCOTT to dismiss the cattle and plants.

"He encloses the lightning in his hands;
Or, gives it commission to strike on the *precise mark*;
His *rolling* thunder announceth on that *very spot*, so
struck,
His jealousy and anger, upon iniquity."

This certainly makes a simple and perspicuous sense; if it differs from Mr. SCOTT a little, it probably is more strongly attached to the words of the original. The word here rendered *a mark*, occurs chap. vii. 20. and is so rendered there.

CHAPTER XXXVII. VERSE 18.

HAST thou spread out the SKY, strong as a MOLTEN LOOKING-GLASS.

We cannot perceive the allusion of this passage, unless we recollect, that the ancient mirrors were not of *glass*, but of polished metal—steel, for instance: now, polished steel has much of that brilliant deep-blue grey cast, which is very striking in an Arabian sky, of whose depth of tint, we are very incompetent judges: in fact, the higher we ascend on mountains, the deeper, the blacker, the sky becomes; so that as Mr. DE SAUSSURE informs us, the deepest blue ribbon was hardly deep enough. We may therefore understand this passage, as speaking of an atmosphere extended, resplendent—clear, brilliant as a mirror, polished with the utmost skill and assiduity.—Let some of our Wolverhampton polished steelwork emulate, if it can, the splendour of the deep blue sky.

This is not very distant from the rendering of Mr. PARKHURST, and SCOTT, *in loc.* who would render "hast thou with him spread out the conflicting ethers, [read, rather, *etherial layers, strata*,] which are strongly resplendent as a molten (metal-line) mirror?"—This probably is a very apt similitude to an Arabian sky, especially seen by night.

But there are reasons for accepting the word rendered *strong* as importing rather an accurate and intimate mixture, by fusion, of different metals; for, it is most likely that the mirrors of the ancients, even in early ages, were composed of a mixture nearly approaching that of which our *specula* for Telescopes, &c. are made. This takes a high polish, and reflects objects with perfect sharpness. The same word is used 2 Sam. xviii. 9. to express the *intangled, intertwined, matted*, state of Absalom's

lom's hair, with the branches of the tree on which he hung. What was so closely intermingled as not to be separated in the instance of Absalom, must import an entire amalgamation in the instance of metals. Professor Klaproth of Berlin, who examined several antient mirrors, found their composition to be in 100 parts, about

Copper.....62 grains

Tin.....32

Lead..... 6

The lead was probably an adulteration of the tin.

Two parts copper, and one of tin, is the proportion of telescope specula.

VERSE 9.

Out of the SOUTH cometh the WHIRLWIND: and COLD out of the NORTH.

I am afraid we must dismiss both *south* and *north* from this passage: for the word (*cheder* חדר) rendered *south*, signifies the secret—not-to-be-seen parts of a house; the private apartments; and the word rendered *north*, signifies “the dispersers,” to scatter, or to *blow by wind*. Thus understood, we have a most beautiful observation on the unnoticeable origin of whirlwinds, which are collections—combinations—crowds of wind rushing at once: and this is contrasted with its direct contrary, a dispersion of particles by means of an insensible current of air.

“From invisible—non-apparent causes the whirlwind collects and advances;

But from dispersing evaporation cold is produced.

By the breath of God frost is given, &c.

It is certain, says SCHEUZER, that, by the “breath of God” here, we must understand the wind; particularly the north, or north-east, which changes rain into hail, &c. Boreas, in Ovid, says,

Induroque nives, & terras grandine pulso.

“I harden the snow, I scatter the hail.”

The following words, “the breadth of the waters is *straitened*”—are peculiarly unhappy, for the fact is, that water in freezing is *dilated*—spread—so as to occupy an increased space, which is estimated as 9 to 8, and we know that this expansive force of frozen water breaks the strongest vases and jugs, it even has burst a bomb of two-inches cast iron. Water, then, when frozen, is not *straitened*. It seems to be better to read with others, “the broad waters are spread out as a solid foundation:” the Vulgate, however, and Theodoret, take it directly contrary: “and the broad waters spread out—liquefy,”—i. e. when a thaw takes place. This idea is confirmed by the use of the word, in verse 18. “a *molten* looking-glass;” a mirror of metal which has been *liquefied*.

CHAPTER XXXVIII. VERSES 31, 32.

Canst thou bind the sweet influences of PLEIADES, Or loose the bands of ORION,

Canst thou bring forth MAZZAROTH in his season, Or canst thou guide ARCTURUS with his sons.

FOR, 1. PLEIADES, *Cimah*; and for

2. ORION, *Cesil*; and for

4. ARCTURUS. *Oish*; vide on chap. ix. 9.

3. MAZZAROTH. *St. Chrysostom* takes this for the *Zodiac*, or Belt containing the twelve signs, composed of stars which are passed over by one luminary or the other; most noticeably by the moon. As the moon revolving monthly, passes through all these signs, and changes in them, whereby she may be said also to proceed through them annually, which the sun really does, and thereby to measure the seasons of the year, there is great propriety in connecting the idea of seasons with *Mazzaroth*, whose stars in their revolution accompany those seasons. Vide on chap. ix. 9.

On the subject of *Oish and his sons*, observe further, that as we have found *Oish* to be the *Northern Wain*, so the Arab writer *Alcamus* mentions the stars of the Great Waggon, of which four compose the wheels, and the three others are *its children*. We are used to call these the horses which draw the waggon; and the Arabs have names for them under that description; the middle one they name *Pihal*; and a small star above it *the Rider*: they have a proverb which says, of a person of erring judgement, or wilfull blindness, “he can see the Rider on *Pihal*, but not the full moon.”

CHAPTER XXXIX. VERSES 1—4.

THE Rock Goat. Vide the Plate.

VERSES 5, &c.

The Wild Ass. Vide the Plate.

VERSE 9, &c.

The Unicorn. Vide the Plate of Rheem, Rhinoceros. To what is adduced in that dissertation, add, Mr. Jackson informs us p. 38 of his “Account of Morocco,” that “Reem, is the Arabic name of the Rhinoceros . . . the Reem is reported by the Arabs to have but one horn till a certain age, when a second appears, and some affirm, that a third appears, when the animal grows old. The horn of the Reem is called by the Arabs *gurn min gurn*, i. e. horn of horns, being extremely hard, and fine grained, and receiving a high polish; it is sold at a most enormous price, and is used for the hilt of swords . . . The Reem is also figuratively denominated *boh girn el harsh*, i. e. the father of the hard horn.

VERSE 13, &c.

Peacocks; the Ostrich. Vide FRAGMENT to CALMET, No. cxliv. p. 93. also Plate of Unclean Land-Birds. Lev. xi.

VERSES 26, &c.

The Hawk, the Eagle. Vide Plate of Unclean Air-Birds. Lev. xi.

AN

AN EXPOSITORY INDEX

TO THE BOOK OF

PSALMS,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

PSALM VII. VERSE 3.

LEST he tear my soul like a Lion.—For soul read *person*: or rather accept the word *soul*, in the sense of *person*, as it was used by our translators, and by other writers in their day: we have the action of the body, as sitting, walking, &c. very frequently applied to the soul, among our elder poets. The kind of lion here mentioned is *Ariah*; for which see Gen. xlix. 11, 12.

PSALM VIII. VERSE 4.

ALL Sheep and Oxen; yea, and the beasts of the field.—Perhaps, rather, 1st, the lesser animals, the flocks, i. e. sheep and goats: 2d, the herd, larger cattle; and 3d, the larger creatures of the cultivated field: or, at most, the larger kinds of game, stags, &c. Our version seems to imply, wild, ferocious animals, which, apparently, are not the creatures intended. *The fowl of the air*:—"tzippor of the heaven;" here the word *tzippor* is evidently of general import. "The fish of the sea, cleaving paths in the waters."

PSALM XVIII. VERSE 33.

HE maketh my feet like Hind's feet, and setteth me on my high places.

This verse is very nearly repeated, Habbakuk, iii. 19. In discussing the subject of the *Rock-goat*, or *Iolim*, (vide Job xxxix. plate) we observed, that it was twice connected with the *ailch* rendered *hind*, or female stag; and we observe, that in this passage, and that of Habbakuk, it is connected with *high places*: which looks as if this *ailch* was, in some degree, similar in nature, or locality, to the rock-goat; which, we know, delights in high places.—What animal can it be?—the *Chamois*, or what? Compare Psalm xxix. 9. *infra*.

T

PSALM XXII. VERSE 21.

SAVE me from the Lion's mouth—the jaws of the *Ariah*: Thou hast heard me from the horns of the Unicorns,—*ramim*: Vide Rheem. Job xxxix. plate. In this place, either more than one horn is ascribed to a single *Rheem*; or several *Rheems*, are supposed to prowl in company. It is said, that two—a male and a female—are the usual company, except in the case of young ones.

For deliverance from lions, vide Dan. vi. 22.; 2 Tim. iv. 17.; Heb. xi. 33.

PSALM XXIX. VERSE 3, &c.

THE voice of the Lord. . . The God of glory thundereth. It is evident, that this phrase, "the voice of the Lord," expresses thunder, and its effects; its usual companions also, as stormy wind, and lightning: for thunder, which is only the noise occasioned by vacuity among the clouds, cannot break a twig, much less destroy cedars of Lebanon:—but a thunder-storm may, by its concomitants, produce the effects here attributed to it. For "the young Unicorn," literally, "son of Reems," which seems to mean, "son of strength," taking one remarkable property as descriptive of the animal, i. e. a strong animal, vide on Job xxxix. plate Rheem. The term *son* is taken in Hebrew in a variety of senses; not less than twenty are mentioned in the article SON, SUPPLEMENT to CALMET'S DICTIONARY.

There is in verse 9, a remarkable association; *the voice of the Lord maketh the Hinds to calve, and discovereth the Forests*: literally, "strips bare the woody marshes:"—but, if the former part of this verse means an animal, the *Hind*, *ailch*, which is made to miscarry by a thunder-storm, then the latter part, by parallelism, should mean an animal also:—this would lead us to read, instead of *ioruth*

ioruth, יַעֲרוּת, יַעֲלוּת, *ioluth*, (which differs only by the heading of a single letter, י, ר,) and then this would be another passage where the *Ioleh*, or rock-goat, is consorted with the *Aileh*. For others, vide on Job xxxix. plate of Rock-goat.

The voice of the Lord—*prodigious thunder*—causes the Hinds to calve—*prematurely*:
And even deprives the female Ibices—of their expected young.

Something of the propriety of this parallelism seems to have struck *Symmachus*, who renders, "the voice of the Lord *multiplies the fields*, and strips the woods; or, *makes bare the forests*:" but how thunder *multiplies* either fields, or their productions, is not easy to say: his rendering removes the *hinds* from this passage. The connection of the latter clause of the verse, with the former clauses, is not very clear.

PSALM XXXVII. VERSE 35.

A GREEN Bay-tree.—This version is adopted in compliance with opinion, rather than conviction; for the original simply signifies, "a *native tree*," a tree growing in its native soil, not having suffered by transplantation: such a tree spreads itself luxuriantly. This is the opinion of Aben Ezra, Jarchi, Kimchi, Jerom, Parkhurst, and *English Margin*.

Whatever therefore, might be said on the Laurel, or Bay-tree, this is not the place for it.

PSALM XXXIX. VERSE 11.

WHEN thou with rebukes dost correct man—
[AISH, a man of consideration] *for iniquity*,
thou makest his beauty—or desireableness—to crack, or to peel off, *to consume away like a moth*,
OSH:—*Surely every man (Adam) is vanity!* This refers, no doubt, to some kind of disease: the word rendered to *consume*, is particularly applied to the leprosy, Job vii. 5. Vide also *Psalms* lviii. p. 139.

For the *Osh*, vide Job iv. 19. where it is taken for the moth-worm. The reasoning there would lead us to consider the present passage as implying, "to be consumed as a moth consumes cloth," or, &c. otherwise, "consumed as by a worm:" for which, vide the place referred to, *ad fin.* Compare Hosea, v. 12. Rank makes no difference in the ravages of disease: a Prince is disfigured by it equally as a peasant.

PSALM XLII. VERSE 1.

AS the Hart panteth after the water-brooks.—
This animal is the *Ail*; for which see Gen. xlix. plate. I think it just worth observing that

on the coins of Mithridates, king of Pontus, &c. s engraved a stag drinking at a brook: whence it should appear, that this was esteemed a very expressive Oriental emblem.

PSALM XLIV. VERSE 19.

THOUGH thou hast sore broken us in the place of DRAGONS; and covered us with the shadow of death.

The *place of dragons* appears to be, literally, "the muds, or mucky shores, of the *Tanim*;"—for which see Lam. iv. plate. *Aquila* renders in an *uninhabited place*, which agrees exactly with what we have remarked, in the article referred to, on the nature, and residence, of that class of animals denoted in Hebrew by the word *tanim*.

PSALM XLV. VERSE 9.

MYRRH, Aloes and Cassia.

1. For MYRRH, vide Gen. xxxvii. 25.; Exod. xxx. 23. Deut. xxix. 11.

2. For CASSIA, vide Exod. xxx. 14.

3. ALOES. On Numbers xxiv. may be seen what we have said on *Lign-aloes*: the same uncertainty attends us here as there. The lxx. have used three words to render this tree: here they read *stacte*; in Prov. vii. 17. *krokinon* (saffron); Cant. iv. 14. *aloth*. Among the differences of opinion on this word, we hardly dare venture to determine; or whether the wood, or the juice, was used as perfume: neither appears to be fit for that purpose. The fragrance of the Aloe flower is remarked in FRAGMENT, No. cccxcvi. It is likely we should refer to some Indian wood, as *Sandal-wood*, *Calambac*, or *Agallochum*; either the wood itself, or an extract which it furnishes. *Wedelius* says, that we must understand by aloë, *xylo-aloe*, or *wood of Paradise*, which grows on the Euphrates, one of the rivers of Paradise:—but if Paradise be farther east than that author supposed, it still brings us to an Indian wood.

For *Ivory Palaces*, vide FRAGMENT. No. viii. 18—20. Also SCRIP. ILLUST. Esther i. 6. Pl.

P

PSALM LV. VERSES 7, 8, 9.

O THAT I had wings like a DOVE! literally,
Who will give me a wing like the DOVE! I would fly off—I would dwell for a time: Behold, I would betake myself to a distance, wandering; I would abide (long) in the wilderness; or on the common. I note this passage, partly because we have in the title of the following Psalm, a seeming allusion to the same idea. "To the chief musician. —On the dove (silent) in distances." Is it possible the titles to these two Psalms have changed places?
if

If the title of "the distant dove" could be affixed to this Psalm, the reason would appear in the verses before us. I would also remark, that this dove does not fly to *her nest*, but to the *wilderness*. I should else have illustrated it, by the instances of those pigeons, which carry tidings from distant places to their homes, as from Scanderoon to Aleppo: and this appears to have been a very antient employment of these birds, for among the hieroglyphics in the temples of Egypt, there is the figure of a dove with a letter under its wings.

A dove in a wilderness, or uncultivated land, *wandering*, is likely to be *silent*, having no mate, no object for which to *coo*, or emit a voice. A banished dove would naturally be silent.

Sophocles (in *Œdip. Col.*) utters the same wish as the Psalmist, "O could I cleave the clouds with the same rapidity as doves!" Pliny, lib. x. cap. 36. says doves are swifter than the hawk.

*Columbæ sæpe cum fugissent milvium,
Et celeritate pennæ vitassent necem.*

PSALM LVIII. VERSES 5, 6.

THEIR poison is like the poison of a Serpent
—NAHASH: they are like the deaf Adder—
PETEN—that stoppeth her ear, and will not hear
the voice of charmers, charming never so wisely.

1. For NAHASH: vide on Gen. iii. 1.

2. For PETEN: vide on Job xx. 14.

For the charming of serpents, beside what is said on this subject in the article ASP, in CALMET, observe, that it is certain, serpents are charmed in India and in Egypt; i. e. that, protected by some preparations (probably, decoctions of herbs) certain persons handle them with impunity. Also, that serpents of the most noxious kinds are taught to raise themselves, and to assume various attitudes, which is called *dancing*; being at first used to this practice while a flute is sounding, they afterwards repeat these motions when provoked by music. Possibly, therefore, the Psalmist may refer to a serpent which being newly caught, will not readily obey the notes of the flute; but, unwilling to rouse itself to activity, continues its apparent slumbers, as if it did not hear the music which commands its performance; or, much rather, to a serpent, which being untamed opposes its sting and venom against the hand that would direct its motions.

But we must observe also, that the Hebrew words here used, *chuber chubarim*, have been rendered by us, on Deut. xviii. 11. in reference to conjurations, *joining the junction, binding the bands*, and so Montanus renders them in this place. Now it was, I believe, always the custom among conjurers, to add to their significative

actions, expressions of the cause or purport of such actions; *muttering* the occasion of their spells. This may lead to another view of the words; *the Asp which does not comply with* (literally, *to לקול*) *the loud call*, nor (נ) *the whispering, the learned whispering*, employed while *binding the bands*, using incantations, which are intended to control it, and to diminish its powers of injury, to constrict, and to debilitate—perhaps we might say, to *numb* it. This agrees with the scope of the passage, *q.* "their poison is extremely venomous; their irascible passions are not to be soothed, either by open and fair proposals, or by secret management:—Therefore, O God, do thou break their teeth in their mouth;"—which is the only way left of effectually preventing them from being deadly. This is indeed the most certain and infallible mode of depriving serpents of their power to injure. For the teeth of the serpent, which convey the poison into the wound they make, vide FRAGMENT, No. cccxcviii. p. 211.

I find great difficulty in accepting the following sentence: "break out the great teeth of the *young lions*." It seems to be a very violent transition from the reptile tribe, the serpent, to beasts, or quadrupeds, young lions; and why *young* lions? the passage requires *strong* lions, deadly lions, to equal, much more to augment, the ideas already attached to the poisonous teeth of serpents; nor ought it to be forgotten, that immediately afterwards the writer returns to the reptile tribe, the slug, or snail:—with what propriety then does the lion, the *young* lion, come in between them? It is perhaps too bold to wish to read, instead of CAPHIRIM, [כפריים, כפריים] CI-APHARIM, from *aphar*, dust, and to consider the word as denoting serpents which dwell in dust,—*q.* "dust-serpents;" or כפפריים, CI-OPHERIM—spotted over, as if with dust, speckled in small grains—"dust-speckled serpents." Vide on Psalm xci. 13.

The same objection of impropriety occurs against reading *waters* in the next verse, and *snail* after it; for *after* the writer had wished his enemies dissolved like water, could he possibly wish them melted like a snail, which is by no means so essentially liquefied as water? Beside this, the word used (מאס) does not so properly signify to *liquefy* as to *break off*, to *chip*; it is therefore ill applied to water. May we venture to take MIM (מים) for that slimy vermin, as denoting the *watery*, or LIQUIFYING—*melting*—*creature*? or, may we read (מגם) *megim*, the *dissolvers*, the *melters*? This appellation would be very descriptive of SNAILS, or SLUGS; but I would much rather unite into one the two words כמו מים, reading כמגמים, which forms a regular plural, *slugs*, or *snails*: leaving open the choice of *either*; because, under the existing difficulties,

we may perceive that these two verses describe these two creatures, without being able to determine which is which, so closely are they allied in form and properties.

The reader will observe the perpetual recurrence of the identifying word, MU, in the latter verses of this Psalm; which seems to have affected the spelling in some places.

The word *shabelul* in the following verse has equal difficulty. The lxx. and Vulgate render "like melting wax;" so does the Syriac, Arabic, and Ethiopian versions. *Aquila* and *Jerom* render "a worm which decayeth;" *Symmachus* renders "the after-birth;" most of the Rabbins prefer the sense of "a snail;" and these are followed by our version. Others, taking the *waters* in the former line for *streams*, take this word for the bed of those streams, which has the advantage of preserving a uniformity of imagery in the verse. To crown the whole intricacy of this passage, the following verses are rendered with equal dissimilarity; and we may perplex the reader, effectually, by desiring him to state grammatically, the references and constructions of the words, "Before your pots can feel the thorns, he (who?) shall take them (the pots?—or, the thorns?) away as with a whirlwind, both living, (the pots?) and in his wrath." A Psalm so full of difficulties, must needs suffer considerable change in an effort to restore it to sense: the very attempt is a tissue of thorns.

Nevertheless, without, in this place, investigating every word, or tracing it to its root, (as we have done) we shall offer what a naturalist may accept as its general import. The reader will guess the difficulties by the marks and supplements.

*The legal—correct truth, O congregation,
The accurate Judicial Sentence, do ye declare?
In Righteousness do ye judge,
O sons of fallen Adam?
Rather, in heart ye work Iniquity in the land;
The guilt of your hands ye balance! ye estimate
bribes by their respective weights.
The headstrong are abandoned so early as from
the [maternal] belly;
They wander astray so early as from the womb!
Their venom resembles the venom of a Serpent;
—nachash.
It is exactly like (כמו) the poison of an Aspic—
peten, (N.B. חרש herosh, for חרש chersh.)
Of an Aspic which shutteth his ears,
That he may not hear (or obey) the loud call,
Or, the gentler whisper of the expert (literally
learned) at binding the bands of conjura-
tion over him.
O God! break their teeth in their mouths;*

*The jaw-teeth of the dust [-spotted] Serpent
destroy entirely, O Jehovah!*

*Let them (false judges) waste away like Snails,
perpetually gliding on themselves, by means
of their slime;*

*Like Slugs dissolving by waste of glair in going:
(If one protrude his horns,*

So surely in that state (כמו) let them be cut off!)

Like the abortive birth of a woman,

Let them not see the sun!

Yes, ye bribed judges!

'Ere your prickles—asperities—harshnesses,

Combine into a complete bramble,

Although intensely vigorous,

*Even in that state (כמו) Divine anger, shall
whirlwind it away.*

*The Righteous shall rejoice when he seeth the
vengeance;*

*His feet shall be washed in the blood of the
impious.*

Yes, every man shall say,

"Verily, there is reward to the Righteous!"

*Verily, this is one of the Judicial Sentences of
God in the land!"*

—The inference is, that though the congregation will not declare a correct judicial sentence; God will declare it by his operations; by his retributive vengeance.

We cannot affirm that the writer of this Psalm had suffered under an unjust prosecution, had been punished by an iniquitous sentence of a corrupt court, or bench of judges; but, if such had been his unhappy condition, he could hardly have expressed himself more forcibly: could hardly have found more apt comparisons by which to describe his shameless opponents, or their progress toward self-destruction; this idea, too, reconciles the vindictive import of the latter verses, (for what deserves vengeance more than iniquity in Judges?) and accounts not only for the Psalmist's prayer, but for the contrary sentence of God, and the joy of the righteous, at beholding its execution.

If any other creature of the soft and melting kind, could be thought more likely to occur to the Psalmist's mind than a snail, or a slug, that creature might have the preference in this place.

PSALM LXVIII. VERSE 10.

*THOUGH ye have lien among the pots, yet
shall ye be as the wings of a Dove covered
with silver, and her feathers with yellow gold.*

This passage has greatly perplexed commentators; and (in my humble apprehension) Mr. HARMER, Obs. Vol. III. p. 55. himself has failed greatly, having rather led his readers out of the way than towards it. The Psalmist is enumerating

enumerating the advantages received by ancient Israel from their Celestial, their All-beneficent Director;

Thou, O God, didst send rain.
 prepared the land.
 gave the word.
 Kings of armies did flee, did flee,
 And the peaceful habitation [*the soldier's home*] divided
 the spoil.

Now, how is it possible, that the same persons as had put to flight these kings, and had taken their spoil home to their families, should *lie among the pots*? (*dunghills*, if we take the word in that sense, is no better): How should these soldiers suffer such disgrace, and that at the moment when they enjoy their victory?—the things are contradictory; but if we accept this as a passage in which the STANDARD of the Dove is alluded to, then we open an entirely distinct view of the article, and may understand it accordingly.

Kings of armies did flee, did flee,
 And the homestead of their pursuers divided the spoil:
 Yes, surely ye cast down among the *sharp crooks of war*
 The dove of wings imbricated [embroidered] with silver,
 And her pinions with yellow gold.
 In this dispersion (*directed by*) the All-benevolent,
 The kings with her [*this dove*] became as white as snow
 on Salmon; *deadly pale through terror*.

It has been proved that the coast of Canaan was denominated "the coast of the Dove;" and we have seen the worship of the dove prevail in that country. That a standard displayed against Israel should contain this *dove*, is no more unlikely than that the Saxon standard, displayed when that people invaded England, should contain the *raven*.—This, we know it did.

Moreover, as this *raven* was wrought by the hands of the sisters of the chiefs, and was, no doubt, embroidered with their utmost skill; and some reports even of magic attending the flapping of its wings as a signal of victory, are transmitted down to us; so this dove, wrought on the banners of the opposers of Israel, was decorated with the utmost magnificence, by those who had executed it, and was enriched with silver and with gold.

The *paleeness* of the kings who accompanied this banner, is extremely characteristic of their appearance, when they saw their sacred emblem cast down, and trampled on by the Israelites: or, if they themselves in their haste did cast it down, that they might flee the more swiftly, the shame is equal.

To complete this statement, it remains to be proved, that the word here employed, *shophetim*, (שֹׁפֶתִים) means an instrument capable of use in war, because it is usually rendered *fire-ranges*, or *pots*; but in Ezek. xl. 43. we have this word, where it can mean no such thing, but a kind of

hook or catch; and so our version understands it—speaking of instruments for the use of the priests; "and within were *HOOKS*," *shophetim*, for the purpose of holding up the victim while flaying, or some of its parts after they were divided: and that somewhat of a hook, or catch, was anciently appended to spears, or lances, we know, from the construction of our ancient English brown bill, from the Lochaber axe of Scotland, &c.; corresponding exactly to which, is the figure of the spear of an Egyptian king in his chariot, which is still extant among the hieroglyphical sculptures of Egypt. If then this hooked implement was an Egyptian, or Canaanitish weapon,—to see the sacred banner of the dove trampled on by rude enemies, together with the arms which should defend it, was an event that might well confound into paleness the kings which surrounded it;—who had expected victory from its supernatural influence, and its marvellous assistance.

In FRAGMENT, No. cclxix, we have produced instances of the dove borne as a military ensign, not indeed, emblazoned on a banner, but affixed to the top of a staff, in the manner of the Roman eagles. A history is also given, from the *Chronicon Samaritanum*, of the dove borne by some people in the neighbourhood of Judea; if the people employed by the Romans were the same as those alluded to by the Psalmist, that reference would determine the sense of this passage. The French armies have lately borne the eagle on the top of a staff as their ensign, in affected imitation of the Romans; under allusion to this fact, and put into modern language, this passage might be rendered "the golden eagles, adorned with laurel wreaths, were cast down among the ordinary bayonets of the troops: a sight at which the marshals of France, who commanded those troops, became deadly pale with terror and mortification." This really and repeatedly happened lately in Spain, before the British army &c. under Lord Wellington.

VERSE 30.

Rebuke the company of the spearmen—literally, *rebuke the beast of the reeds, or canes*. This means the *wild-boar*, in all probability; for the Behemoth, or Hippopotamos, (vide Job xl. 16.) is too distant. That the Wild-Boar was considered as destructive to the people of Israel, vide Psalm lxxx. 13. That wild-boars abound in marshes, fens, and reedy places, appears from LE BRUYN, who says,

"We were in a large plain full of canals, marshes, and bullrushes. This part of the country is infested by a vast number of *wild-boars*, that march in troops, and destroy all the seed and fruits of the earth, and pursue their ravages as far as the entrance into the villages. The inhabitants, in order to remedy this mischief, set fire

fire to the rushes which afford them a retreat, and destroyed above fifty in that manner; but those that escaped the flames spread themselves all round, in such a manner, that the people themselves were obliged to have recourse to flight, and have never disturbed them since, for fear of drawing upon themselves some greater calamity. They assured me, that some of these creatures were as large as cows." TRAVELS, Vol. II. p. 62. See also Apollonius, lib. ii. v. 820.; Virgil, En. x.; Ovid, Metam. viii.

PSALM LXXIV. VERSES 13, 14.

THOU didst divide the sea by thy strength: thou brakest the heads of the DRAGONS in the waters: thou brakest the heads of LEVIATHAN in pieces, and gavest him to be meat to the people inhabiting the wilderness.

These *Dragons* are *taninim*, for which, vide on Lam. iv. plates: as these are mentioned with the *Leviathan*, yet distinguished from him, it is clear this word cannot in this place represent that creature. It appears, also, that the reading of *heads*, (plural) to *Leviathan* (singular,) must be erroneous; for, when had one *Leviathan* more than one head? Moreover, if "the people inhabiting the wilderness," be the true import of the place, then no creature of the *whale* kind can possibly be intended by *Leviathan*; for, how should a *whale* be found, or be cut up for food, in the wilderness? As to these "people of the wilderness," there is great difficulty; Mr. PARKHURST thinks it were better to read "*ravenous birds* haunting the wilderness." BOCHART thinks, *wild beasts*. The word occurs Psalm lxxii. 9.; Isaiah xiii. 21. xiii. 13. xxxiv. 14.; Jer. l. 39. Perhaps it means creatures, or persons, conversant with the waters, or the sea: seamen, or marsh-animals. We know, that when a whale is killed by our fishermen, on the coast of Greenland, and while it is in cutting up, the bears and the birds stand on the shore roaring and murmuring because their natural food is taken from them; many of the birds will alight on the dead whale, and feast on what they can peck out from the huge animal. Crocodiles are so rare, that we cannot affirm the same of the wild animals which inhabit the shores where they inhabit; but, it appears credible by parity of reason: for why should not vultures, &c. devour dead crocodiles, as seabirds do dead whales? Whether, therefore, "*people* inhabiting the wilderness," or "*birds*," &c. inhabiting the wilderness," are meant, may be questioned: perhaps it would be better to say simply "*inhabitants of the desert shores*." Job seems to hint at the improbability of parting the *Leviathan* among the merchants, chap. xli. 6. so

that the crocodile was not usually cut in pieces, as whales are, to be barrelled up.

PSALM LXXX. VERSE 13.

THE Wild-Boar out of the wood doth waste it, and the wild Beast of the field doth devour it. This should rather be, "the wild boar out of the marsh," or miry places; for which, vide Psalm lxviii. 30. The *wild-beast* is a general term for animals; it may mean such as weasels, polecats, &c. those of the *productive* field, rather than lions, or tigers. This seems preferable to the idea which would render "a solitary wild-boar;" though that has authority on its side. For the figure of the wild-boar, vide plate of Unclean Animals, Lev. xi.

PSALM LXXXIV. VERSE 3.

YEA, the SPARROW hath found a house, and the Swallow a nest . . . even thine altars, O Lord.

The word *tzippor*, rendered *Sparrow*, signifies, much more generally, *birds*: as Deut. iv. 17.—"the winged fowl that flieth in the air," Deut. xiv. 11. "Of all clean birds ye may eat," Deut. xxii. 6.; Psalm viii. 9.; In Ezek. xxxix. 4, 17. this word denotes birds of prey.

The word *deror*, in the opinion of *Bochart*, signifies rather the *Pigeon* than the *swallow*; and with him agree the Versions—Greek, Vulgate, Chaldee, Arabic, and Syriac.

The word *deror* signifies, in some places, *liberty*, so that it may import a free bird: this particularly agrees with the stock-dove. St. Basil, Epist. 75. calls a covey of pigeons, "a free flight," *αὐτονομον ἀγέλην* *autonomos* signifies *self-governed*; or following the determination of the party's self. But, I rather think the pigeon is a free bird, in the sense of not being molested; for Baron du Tott informs us, that thousands of them feed from the public granaries of corn, at Constantinople, without being driven away.

PSALM XC. VERSE 11.

EVEN according to thy fear is thy wrath: that is, in plain English, "thy wrath extends commensurate to our fear of thee:" this certainly never could be the sense intended: for כִּי read מ, i. e. for וּכְרִיאתֶךָ, read וּמִרְאֵתֶךָ, "even far BEYOND thy fear, i. e. our fear of thee, is thy wrath."

PSALM XCI. VERSE 13.

THOU shalt tread upon the Lion, SHACHAL, and Adder, PETEN: the young Lion, OEPHIR, and

and the Dragon, TANIM, shalt thou trample under feet.

1. SHACHAL, the black Lion, vide Job iv. 10.
2. PETEN, the Asp, or Aspic, vide Job. xx. 14.
3. For the CEPHIR, vide Job iv. 11.
4. For the TANIM, vide on Lam. iv. plate.

It is probable that *tanim* may in some places mean furious water animals, found in rivers; whether the crocodile, or some other.

It should be remarked, that the most ancient interpreters render *shachal* here, by a *serpent* of some kind; which, no doubt, preserves the parallelism with the *adder*, in the following member of the sentence. Beside this, they observe, that it is more natural to tread under feet serpents, than lions. *Bochart* thinks the same, and supposes the word here to mean, rather a *black serpent*, than a *black lion*. Several species of *serpents* are *black*: as the soot-coloured serpent, the *hæmorrhous*; the *dipsas*, which is brown, but black toward the tail; or others. We find in *Suidas*, a manner of speech employed by those who undertook to interpret dreams, "He who dreams that he treads on serpents, will escape the attacks of his enemies."

"CEPHIR does not here signify a young lion, but a serpent. *Nicander* (*Theriac. v. 463.*) calls the *Cenchris*—serpent 'a spotted LION,' λεων αἰολος: *spotted*, because, in fact, he is covered with specks; a *lion*, because, like that animal, he raises his tail when about to fight; and because, like the lion, he bites and fills himself with blood." [A more probable lection, and reason, we presume to think we have already given on Psalm lviii. But this representation strongly supports our rendering in that place.]—If any one incline to refer this word to *lions*, see the instance of *Daniel*, Dan. v. For the treading on serpents, vide Mark xvi. 13.; Acts xxviii. 5.

PSALM XCII. VERSE 11.

BUT my horn shalt thou exalt like the horn of a Unicorn, RAIM; I shall be anointed with fresh oil. For the Unicorn, vide RHEEM, Job xxxix. plate. The *fresh oil* of this place is, literally, *green oil*; meaning, I suppose, oil fresh drawn from the olive, as our translators understand it; but possibly it may denote fragrant substances infused in such oil, which may impart a greenish colour to it: so that it may be at once both fresh and fragrant. Vide *HARMER*.

VERSES 12, 13, 14.

The righteous shall flourish as the Palm-tree, TAMAR; he shall grow as a Cedar, ARETZ, of Lebanon. Those that be planted in the house of the Lord shall flourish in the courts of our God.

1. TAMAR,—the usual word for the palm.

2. ARETZ,—the usual word for the cedar.

Observe, on the planting of trees in the courts of the Lord's house, that the prohibition, Deut. xvi. 21. was not at this time understood to forbid ALL trees, nor perhaps all kinds of trees; but, if grove be rightly rendered there, certain kinds of plantations only, vide Gen. xxi. 33.

PSALM CII. VERSES 7, 8.

I AM like a Pelican of the wilderness; I am like an Owl of the desert; I watch, and am as a Sparrow on the house-top.

1. PELICAN, kaat, vide Unclean Birds, Lev. xi. Plate.

But this *Pelican* is described as being "of the wilderness," on which we remark that this bird often hatches her young far from water, in some remote and private place, for security: and though her young, like herself, are fond of water, yet they experience no deficiency of that article, she carrying plenty of it to them in the great pouch, or bag, under her throat.

2. The OWL, cus. On Lev. xi. 17. we ventured to think this name designed a water-bird; and being associated here with the *Pelican*, it confirms our idea; perhaps it is the *Sea-gull*.*

3. SPARROW, tzippor: see on Psalm lxxxiv. 4.

But we should remark, that *Jerom* does not mention the *sparrow*, but merely reads "a solitary bird;" neither does any *Rabbi* mention the *sparrow*; whence *SCHEUZER* thinks an *owl* may here be intended; which kind of bird is well known as a frequenter of the house-tops: against this it may be said, that *tzippor* should rather represent a clean bird, than an owl: perhaps, a bird accustomed to build among the residences of mankind, but now deprived of its mate. If it were anciently a custom in the East to keep birds in cages, such a prisoner might be referred to—the idea imports a bird solitary, melancholy, and drooping; much like our robin-red-breast when confined in a cage.

PSALM CIII. VERSE 5.

WHO satisfieth thy mouth with good things, so that thy youth is renewed like the Eagle's.

The Eagle here is *nesher*; for which, vide the plate of Unclean Air Birds, Lev. xi. The youth of this eagle is, probably, that renovation of strength and spirits which is experienced by this bird after moulting. As the eagle is a long-lived bird, this renewal of youth might, perhaps, be a familiar phrase, as we say of a person reviving after illness, "He has taken a new lease of his life."

PSALM

PSALM CIV. VERSES 10, 11, 12.

THE springs . . . give drink to every Beast of the field; the wild Asses quench their thirst; around them the Fowls of the heaven reside, which give forth their voices from among the branches.

1. Beasts of the field, not of the sandy desert.

Vide Psalm viii. 4.

2. Wild ASSES, *paraim*. Vide Job xxxix. plate.

3. WINE, OIL, BREAD, need no explanation.

4. TREES of the Lord—verse 16. May these be the *ahalim* of Numb. xxiv. which are no less the “plantation of Jehovah,” than the cedars? *i. e.* may a specific kind of tree be intended here, to accompany the cedar, or only large trees in general?

5. Where the BIRDS—*tziporim*—make their nests.—What birds build on the cedars? *Tziporim* cannot here identify the sparrow.

6. As for the stork, *chasidah*, the fir-trees are her house. Vide Unclean Water-birds, Lev. xi. Plate.

7. The FIR-TREE, *berush*, vide on 2 Sam. vi. 8. and what is said of the *chasidah*, by Dr. SHAW, &c. in the place referred to above.

8. The high hills are a refuge to the wild Goats—IOLIM—the ibices. Vide the Rock Goat, Job xxxix. plate. Also Psalm xxix. 9. ante.

9. The rocks are a refuge to the Conies—SHAPHANIM. Vide on Prov. xxx. 26. plate.

10. YOUNG LIONS, *cephirim*, verse 21. Vide on Job iv. 10, 11.

11. “This great and wide sea, wherein are things creeping innumerable, both small and great beasts.”—Though the general intention is evident, yet the use of the word *beasts*, to denote creatures which live in the sea, is highly improper: *living creatures*, or some more general term, had been more appropriate.

12. LEVIATHAN, vide *Taninim*, Lam. iv. plate.

PSALM CV. VERSE 27, &c.

FOR the plagues of Egypt, here referred to by the Psalmist, vide on Exod. iv. &c.—But we must not pass the present recollection of the miracles performed in Egypt, without remarking the different order in which they stand; for *Darkness* is nearly first in the Psalm, but nearly last in Exodus: and this is not the only one of which the order is changed, as appears by comparison. Others also are varied.

EXODUS.

1. Aaron's rod changed,
2. Waters into blood,
3. Frogs,
4. Gnats, or lice,
5. Flies,

PSALM.

1. Aaron's signs, &c.
2. Darkness,
3. Water into blood,
4. Frogs,
5. Flies,

6. Mortality of beasts,

7. The boil,

8. Hail, &c.

9. Locusts,

10. Darkness,

11. First-born slain.

6. Lice, or gnats,

7. Hail, &c.

8. Vines smitten,

9. Trees broken,

10. Locusts,

11. First-born slain.

1. VINES, *giphenim*. Probably a certain kind of vine, such as was in bloom, &c. at the season indicated. *Guphenin*, according to the gloss in the Gemara, means *late vines*. The author of *Aruch* observes, that it denotes *wild vines* [rather, *natural vines*, vines not carefully cultivated] that put forth at the end of the vintage.

2. Fig-TREES, *taanuth*. If these fig-trees of Egypt were of the same kind as that employed by Adam to make waist-girdles of, Gen. iii. 7. (and the same word is used in both places,) then *that* was not an uncommon kind of fig, but the ordinary *taanah*; unless this word in this place may be interpreted to mean such a kind as has received the name of Adam's Fig, or any other of East-Indian growth: which is at least attended with difficulty.

3. LOCUST—*arbeh*. Vide Joel ii. plate.

4. CATERPILLAR, *ialak*. This may be a species of locust; but certainly not the *arbeh*, from which it is distinguished here, and in Joel i. 4. ii. 25. unless it may denote a different state of the locust *arbeh*, ravaging either a little before, or together with the *arbeh*, in its migratory state: in which case it may be the locust in its worm state: and this seems very probable, from the action attributed to the *ialak* in Nahum iii. 16. “The *ialak* has stripped off its skin”—cast its exterior covering, and consequently has assumed another form, which, having wings, enables it to fly away. However, as many other *worms*, beside that of the locust, cast their skins, this particular only proves that the *ialak* is not that insect, or any other, in a winged state: but it may be, as the lxx. render it in five passages out of eight, where it occurs, *bruchus*, the *chafer*, or *may-bug*, in its grub state.

Nevertheless, the passage, Jer. li. 27. where the *ialak* is described as *rough*, *i. e.* with hair standing an end on it, leads us very naturally to the rendering of our translators in that place, “the rough caterpillar,” which, like other caterpillars, at a proper time, casts its exterior covering, and flies away in a winged state. The several changes of insects are not always well understood, even by tolerable observers; but, supposing that their different states have different names, in reference to the same insect, or to insects which differ in their periods of appearance (as some are a few weeks, others several years in their grub, or worm state,) it is no wonder that we find it difficult to ascertain which is meant by its appellation in Hebrew; though we perceive the general application, or import, of the terms employed by the Sacred Writers.

PSALM

PSALM CV. VERSE 36.

HE smote also all the FIRST-BORN in their land: the chief (or headings) of all their strength—(strengths plural—prolific powers.)—This passage seems to militate against taking the word *first-born* in Exod. x. 1. 15. as signifying chiefs, dignitaries; but on reflection, it will not appear to impugn that sense, as, the *first-born*, by birth, were usually also chiefs, or principals,—headings, of families.

VERSE 40.

He asked and he brought Quails—SHELAV. Vide on Exod. xvi. 13, &c.

Bread from heaven. Vide the Manna, *ib.* The word *bread* is taken for food in general.

PSALM CIX. VERSE 23.

I AM tossed up and down like a Locust—ARBEH. Vide on Joel ii. plate.

PSALM CXVIII. VERSE 12.

THEY compassed me about like Bees—DEBORIM: They are quenched as a fire of Thorns—KUTZ.

1. BEES, the usual word for this insect.
2. THORNS—Kutz. Vide on Gen. iii. 18.

PSALM CXX. VERSE 4.

SHARP arrows of the mighty, with coals of Juniper. Vide on 1 Kings xix. 4.

It is possible that juniper wood was anciently reputed to have (and it really may have) a peculiar property of retaining fire for a very long time; and this might give occasion to the Psalmist's allusion. Till that be ascertained, it may be somewhat more than merely amusing to notice the power of retaining fire possessed by other substances, in which it would not be readily suspected.

Dr. Clarke relates in his Travels, article *Tiberias*, Vol. II. p. 479. an instance not foreign from the purpose. "The French, during the time their army remained under Buonaparte in the Holy Land, constructed two very large ovens in this castle (of Tiberias.) Two years had elapsed, at

the time of our arrival, since they had set fire to their granary; and it was considered a miracle by the inhabitants of Tiberias, that the combustion was not yet extinguished. We visited the place, and perceived that, whenever the ashes of the burned corn were stirred by thrusting a stick among them, sparks were even then glowing throughout the heap; and a piece of wood being left there, became charred. The heat in those vaulted chambers, where the corn had been destroyed, was still very great."

PSALM CXXXVII. VERSE 1, 2.

WE hanged our harps on the Willows, in the midst of Babylon.

"It is out of doubt that the word (*arabhim, orebim, gorebim*) signifies willows: all interpreters agree in it, and the lxx. translate it so. The Arabs call this tree *garabon*: which approaches the hebrew appellation. The rivers of Babylon, are the canals of the Euphrates, whose moisture suits this tree." If this be so clear, as to be "out of doubt," then the word *bochim*, weepers, can hardly mean *willows*, as some have thought, unless it be those we call *weeping willows*. The species of this tree in Babylon is not distinguished.

PSALM CLX. VERSE 3.

THEY have sharpened their tongues like a serpent—NAHASH. Adder's poison is under their lips.

The word for *Adder* here is not *peten*, as we have it elsewhere, but *ocashub*, or *acshub*: the name implies *to bend back on itself*. It is rendered *Asp*, by the lxx. and Vulgate: and is so taken Rom. iii. 13. The name is from the Arabic, *achasa*. But, there are several serpents which roll themselves in circles previous to darting on their enemy: if this be a character of the *Asp*, it is not peculiar to that creature. On the whole, I rather think this word does not describe the *peten*. The word occurs only in this place. To allude to the rattle-snake, as some have done, is very incorrect, since the rattle-snake is peculiar to America, consequently was unknown to the Psalmist.

AN EXPOSITORY INDEX

TO THE BOOK OF

PROVERBS,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER III. VERSE 15.

WISDOM is more precious than Rubies—*peninim*—PEARLS.—Vide on Job xxviii. 18.

CHAPTER V. VERSES 4, 5.

THE lips of a strange woman drop (as) an Honeycomb, and her mouth is smoother than Oil; but her end is bitter as Wormwood, sharp as a two-edged Sword.

This passage seems to be misunderstood in its latter clause; for, certainly, the *bitterness* of the wormwood is opposed in correspondence to the *sweetness* of the dropping honey; honey dropping from the comb; which, flowing of itself, is most valuable, says Pliny, lib. xi. cap. 15. Homer also mentions "honey spontaneously distilling," as peculiarly sweet, Il. xviii. 109. Vide chap. xvi. 24. The *bitterness* of wormwood is well opposed to this; but, how is the *two-edged sword* opposed to *oil*?—which is a vegetable juice, not the *quality*, or form, of any instrument. By every appearance and rule of parallelism, therefore, this *sword* should be a vegetable also. The words literally are, "bright as a devastator of mouths:" perhaps, "active as a parasitical plant, which, having many suckers, draws away the nourishment from the tree it has fastened on, and so destroys it." This idea maintains the uniformity of the passage; it is well adapted to express the *end* of the prostitute; the consequence of connection with her: and is also, nearly, if not exactly, the very words of the text. The word (חרב) rendered *sword*, signifies to exhaust, to demolish, to drain quite dry; and when figuratively applied, is used of other *wasting* instruments beside the sword; as of an *axe*, or *chissel*; also of *drought*, or *heat*. The difficulty is in the word "bright:" if for חרה, חרה might be read, the passage would stand thus in opposition. *Her mouth* drops what is *smoother than Oil*; *her end* consumes by inflammation, like an

exhausting plant, which has many draining mouths. *Her feet*, &c.

But there is no occasion for any alteration, if the word here rendered by interpreters, *sharp*, may be taken for *sharpness*—PUNGENCY—*biting*, in respect to taste: and this would maintain a perfect correspondence by contrast, with the *smoothness* of the coincident verse. Can the bitter aloës be meant here? or what plant answers to this character?

Her address [*wheeling*, at first,] is smoother than oil;
Her end [*prolonged acquaintance*] is pungent as the ex-
hauster [*plant*] of many mouths.
Her feet go down to death;
Her steps take hold of the grave.

Quæ mihi misero amanti ebibit sanguinem,

says *Plautinus*, speaking of his mistress, "Abusing my passion for her, she has sucked my blood."

On verses 15, &c. and for the comparison to the female *Ibex*, vide Job xxxix. plate: and Psalm xxix. 6, 3.

CHAPTER VI. VERSES 6, 7, 8.

GO to the Ant, thou sluggard, consider her ways and be wise.

Which having no guide, overseer, or ruler, provideth her meat in the summer, and gathereth her food in the harvest.

This passage is a text for a long discourse, but a long discourse would be misplaced here. The same character of foresight is given to the Ant (apparently by a different writer from Solomon) in chap. xxx. 25. "The Ants are a people not strong; yet they prepare their meat in the summer." From these testimonies, and from many others among the ancients, I conclude, that in warmer climates, the ants do not sleep during winter; but continue more or less in activity, and during this season enjoy the advantages arising from their summer stores: which does not invalidate the remark of our naturalists, that in this colder

colder climate ants are torpid during winter. In our hot-houses, I speak from observation, ants are not torpid. We may appeal (as SCHEUZER does) to Aristotle, Pliny, Plutarch, Virgil, and St. Jerom, (Life of Malchus;) but we only quote Horace, who says, Sat. 1.

*Parvula nam exemplo est magni Formica laboris:
Ore trahit quodcunque potest, atque addit acerco
Quem struit, haud ignara, ac non incauta futuri.*

"The Ant, small as she is, sets us an example; she is very laborious, she carries in her little mouth whatever she can, and adds it to her constructed store-heap, providing against a future period, with great precaution."

*... frigusque, famemque,
Formica tandem quidam expavere magistrâ.*

"After the example of the ant, some have learned to provide against cold and hunger;" says Juvenal, Sat. 6. These testimonies may convince us that the ant in warmer climates provides against a day of want. As this insect is such a favourite with both naturalists and moralists, I shall quote BARBUT's account of the ant in his work on British insects, p. 277.

"The outward shape of this insect is singular and curious, when seen through the microscope. With good reason, it is quoted as a pattern of industry. A nest of ants, is a small, well regulated republic: their peace, union, good understanding, mutual assistance, deserve the notice of an observer. The males and females, provided with wings, enjoy all the pleasures of a wandering life; while the species of neuters, without wings or sex, labour unremittingly. Follow with your eye, a colony that begins to settle, which is always in a stiff soil, at the foot of a wall or tree, exposed to the sun; you will perceive one, and sometimes several cavities, in form of an arched vault, which lead into a cave contrived by their removing the mould with their jaws. Great police in their little labours, prevents disorder and confusion: each has its task; whilst one casts out the particle of mould that it has loosened, another is returning home to work. All of them employed, in forming themselves a retreat of the depth of one foot, or more; they think not of eating, till they have nothing farther left to do. Within this hollow den, supported by the roots of trees and plants, the ants come together, live in society, shelter themselves from summer storms, from winter frosts, and take care of the eggs, which they have in their trust. The wood-ants are larger than the garden ones, and also more formidable. Armed with a small sting, concealed in the hinder part of their abdomen, they wound whoever offends them. Their puncture occasions a hot, painful itching. They are carnivorous; for they dissect with the utmost neatness and delicacy, frogs, lizards, and

birds, that are delivered over to them. The preservation of the species, is in all animated beings the most important care. Behold, with what concern and caution the ants at the beginning of the spring load themselves between their two jaws with the new hatched *larvæ*, in order to expose them to the early rays of the beneficent sun. The milder weather being come, the ants now take the field. Fresh cares, new labours, great bustling and laying up of provisions. Corn, fruits, dead insects, carrion, all is lawful prize. An ant meeting another, accosts it with a salute worthy of notice. The ant overloaded with booty, is helped by her fellow ant. One chances to make a discovery of a valuable capture, she gives information of it to another, and in a short time a legion of ants come and take possession of the new conquests. No general engagement with the inhabitants of the neighbouring nest, only sometimes a few private skirmishes, soon determined by the conqueror. All those stores, collected with so much eagerness during the day, are immediately consumed. The subterraneous receptacle is the hall, where the feast is kept; every one repairs thither to take his repast; all is in common throughout the little republic, and at its expence are the *larvæ* fed. Too weak and helpless to go a foraging, it is chiefly in their behalf the rest go to and fro, bring home and lay up. They shortly turn to chrysalids, in which state they take no food, but give occasion to new cares and solitudes. All human precautions have not hitherto been able to supply that degree of warmth and minute attention, which the ants put in practice to forward the instant of their last metamorphosis. The insect issuing forth to a new life, tears its white transparent veil; it is then a real ant, destitute of wings, if it has no sex; winged, if it be male or female, always to be known by a small erect scale placed on the thread, which connects the body and thorax. The males, who are much smaller, seldom frequent the common habitation; but the females much larger, repair to it to deposit their eggs, which is all the labour they undergo. The winter's cold destroys them. The fate which attends the males is not well ascertained; do they fall victims to the severity of winter? or are they made over to the rage of the neighbouring ants? These latter pass the winter in a torpid state, as some other insects do, till spring restores them to their wonted activity: they have, therefore, no stores for winter, no consumption of provisions. What are commonly sold in markets for ant's eggs, are grubs newly hatched, of which, pheasants, nightingales and partridges, are very fond.

"In Switzerland, they are made subservient to the destruction of caterpillars: which is done by hanging a pouch filled with ants upon a tree; and they

they, making their escape through an aperture contrived on purpose, run over the tree, without being able to reach down to the ground, because care has been previously taken, to besmear the foot of the tree with wet clay or soft pitch; in consequence of which, compelled by hunger, they fall upon the caterpillars and devour them."

CHAPTER XV. VERSE 19.

THE way of the slothful is as a hedge of Thorns—CHEDEK; but the way of the righteous is plain.

I apprehend, there is a beautiful opposition here, which is lost in our rendering: *q.* "the narrow way of the slothful is like perplexed pathways among sharp Thorns, [the word is rendered "brier," Micah vii. 4.] whereas, the broad road of the righteous is a high bank," (as rendered elsewhere, a CAUSEWAY,) *i. e.* strait forward; free from obstructions; the direct, conspicuous, open, path. 1. The common course of life of these two characters answers to this comparison. 2. Their manner of going about business, or of transacting it, answers to this: an idle man always prefers the most intricate, the most oblique, and eventually the most thorny measures, to accomplish his purpose: the honest man prefers the most liberal, and strait forward. It seems hardly possible to determine what kind of thorn this *chedek* is: perhaps the "brier," used by our translators in Micah, may be retained without injury: and perhaps, too, this *chedek* may be a plant of some verdure, like our brier, and of which we call a scented kind sweet-brier; so a judge (the comparison in Micah) may be a well-looking (*q.* verdant) character, but if he take bribes, he becomes a brier, holding every thing that comes within his reach, hooking all he can catch; not a sweet-brier, but a rank weed:

*Sauciat atque rapit spinus paliurus acutis:
Hoc etiam judex semper avarus agit.*

CHAPTER XVIII. VERSE 14.

THE spirit of a Man will sustain his infirmity: but a wounded spirit who can bear?

Perhaps this were better taken literally, "the Spirit of a CHIEF will absolutely surround him—his person—(v) against bodily weariness; but a spirit (smitten) touched, how shall that repose? Weariness of body, may be counteracted by vigour of mind, beyond a mere loss of strength, which may be recruited by repose; but, if the mind be uneasy—sore—in a man of dignified station, what repose can recruit its vigour?—so Ovid says, *de Pont. lib. i.*

*Jam mihi deterior canis aspergitur atas:
Jamque meos vultus ruga senilis arat.
..... causa est,
Anxietas animi, continuusque labor.*

Does Solomon here mean to hint at the evils incident on dignified station?

CHAPTER XXV. VERSE 16.

HAST thou found HONEY? eat so much as is sufficient for thee, lest thou be filled therewith, and vomit it.

I suppose, that this precept is applicable to Honey in general: according to the Greek Proverb . . . *Και μελιτος τό πλεον έξε χολή*, "even Honey in excess becomes gall:" but I think it is further illustrated by the properties of certain kinds of Honey, of which we have information from the antients. *Pliny* speaks of it thus: *In some years, the Honey is very dangerous about Heraclea Pontica; authors know not what flowers the bees extract it from. Here is what we have learned of the matter: there is a plant in those parts called ægolethron, whose flowers in a wet spring acquire a very dangerous quality when they fade; the Honey which the bees make of them is more liquid than usual, more heavy and redder: its smell causes sneezing: those who have eaten of it, sweat horribly, lie upon the ground and call for nothing but coolers. There is found,* continues he, *upon the same coast of the Pontus, another sort of Honey, which is called, mænomenon, because it makes those mad that eat of it. It is thought the bees collect it from the flower of the rhododendros, which is frequent among the forests. The people of those parts, though they pay the Romans a part of their tribute in wax, are very cautious how they offer them honey."*

When the army of the ten thousand came near to Trebisonde, a very strange accident befel it, which caused great consternation among the troops, according to *Xenophon*, who was one of the principal leaders of it. *As there were a great many bee-hives* says that author, *the soldiers DID NOT SPARE THE HONEY: they were taken with a VOIDING upwards and downwards, ATTENDED with DELIRIUMS; so that the least affected, seemed like men drunk, and others like MADMEN, or people at the point of death. The earth was strewed with bodies, as after a battle; nobody, however, died of it; and the distemper ceased, the next day, about the same hour that it began; so that the soldiers rose the third and fourth days, but in the condition people are in, after taking a strong potion."* *Diodorus Siculus* relates the same fact, with the same circumstances.

The precept of Solomon, therefore, seems to be grounded on two principles: 1st, Honey, whose properties are generally understood, if eaten to excess, is dangerous; and if not deadly, is inconvenient: 2d, Honey, not native, but found by accident, whether foreign Honey, or other whose properties are unknown, should, especially, be refrained

frained from; lest it become not merely inconvenient, but extremely injurious and nauseous.

VERSE 20.

As he that taketh away a garment in cold weather, and as vinegar upon nitre; so is he that singeth songs to a heavy heart.

This passage has its difficulties: *first*, that here two things are compared to a third, which is unusual: *secondly*, that the first of these things is privative, taking away a garment; the second, is additional, adding vinegar to nitre. In what respects does the first resemble the second, so that they should both form comparisons to the third? The garment taken away is an outer cloke, wrapper, or kind of mantle. The word rendered *vinegar*, signifies *fermentation*; and vinegar, we know, is a liquor which has undergone the fermentative process. The nitre of this passage, is not our common nitre, or salt-petre, but a natural salt, the *natron* of Egypt. It is used for washing linen, &c. and to this Jeremiah alludes, chap. ii. 23. "Though thou wash thee with nitre, and much soap."

"*Natrum* is a genuine, pure, and native salt, being a fixed *alkali*, plainly of the nature of those made by fire from vegetables, [such as our pearl-ashes, which are used in washing linen: accordingly, Pliny says, "formerly a great quantity was obtained from the ashes of oaks, but now that method is disused." He mentions several places where it is found; and says, "it should be light, spongy, and honey-combed."] *Natrum*, whether native or purified, dissolves in a very small quantity of water; and in many parts of Asia is used for washing: it is also made into soap, by mixing it with oil. It is found in great abundance, and the natives sweep it from the surface of the ground, and call it *soap-earth*." Dr. SHAW says, "On making experiments with the *Natron* we find it to be an *alkali*, and to occasion a strong fermentation with acids, which will very well illustrate Prov. xxv. 20. where the singing of songs to a heavy heart, is finely compared to the contrariety or colluctation between *vinegar* and נתר, *Natron*; not nitre, or salt-petre, as we render it, which being an acid easily mixes with *vinegar*."

The effervescence then produced by pouring vinegar on *Natron*, (either, or both, of which, would be quiet and silent if let alone, or not mixed) resembles the effect of "song upon song," sung to a heart of anxiety: which is only exasperated, and as it were put into a ferment, by the intrusion and opposition. This phraseology too is not unknown to our populace, who speak of a person as "being in a ferment," whose mind is agitated by the uneasiness of passion, or by contradictory sentiments, about to manifest their forcible re-action on each other, by bursting forth

with violence. The same mode of speech was adopted anciently. Plautus, cited by Leigh, says, "*Mea uxor tota in fermento jacet.*"—"My wife lies all in a ferment." [Compare the metaphor of leaven, the principle of fermentation, 1 Cor. v. 6, 7, 8.] and "*Ecquid habet acetum in pectore?*"—"Has he any *vinegar* in his breast?"

What resemblance has all this to the removal of a covering in cold weather? *that* might be compared to an unfaithful friend, or to a privation of something necessary, at the very time when its services are most requisite; but, how is it like to the pouring of *Vinegar* upon *Natron*, or to the singing of songs to a heavy heart?—N.B. The usual rendering of the original phrase, is "evil heart." Can the phrase signify a *backward, reluctant* heart, not to be incited to action—as if by a war song, or, &c.? (Vide on chap. xxvi. 24.) nor to devotion, as if by a *sacred* song? or, may there be any allusion to the instance of David singing before Saul? "song after song," but not to the cure of his "evil heart."

CHAPTER XXVI. VERSE 2.

As the Bird, TZIPPOR, by wandering, and as the Swallow, DERUR, by flying, so the curse causeless shall not come. For *tzippor*, and *derur*, as here in connection, vide Psalm lxxxiv. et. al.

VERSE 23.

Like a Potsherd covered with silver drosses, whereby it looks brilliant as if it were good metal, whereas it is only earth, are burning lips, ardent professions of service, but an heavy reluctant heart. This seem to be rather the idea of the writer than a *wicked*, i. e. criminal heart; the words are the same as in chap. xxv. 20. The simile is expressive of a meaning obvious enough. We have seen in our own pottery wares, pieces so well *silvered*, or *bronzed*, that they might easily be mistaken for articles made of metal; a *broken piece* of such a thing, though brilliant, is at once worthless and useless.

CHAPTER XXX. VERSE 15.

THE Horse Leech, OLUKAH, has two daughters, GIVE, GIVE. These three are never satisfied; four say not, "Enough."—1. *Sheol*, the state of the dead. 2. *The barren Womb*. 3. *The Earth, not filled with water*. 4. *The Fire saith not, "Enough."*

This is a very difficult passage; does the word *olukah* signify a *Leech*, a *Horse-Leech*? so say the Targum, the lxx. and the Vulgate. The root signifies in Arabic *to adhere to, to cling, to hang fast*; this well describes a *Leech*, which is a kind of worm, of an oblong body, and which moves by attaching

attaching the head and tail, and raising the body into an arched form.

The Horse-Leech, like other Leeches, has the mouth at the very end of his body, where he is slenderest, and he is thickest toward the tail; the tail itself very slender; belly yellowish green, back dusky. This worm inhabits standing waters: is famous for sucking blood from any animal which ventures into water where they are; will even attack large animals; as horses, or mules, clinging to their noses, while they are drinking. Such is a Horse-Leech; but what are its *two daughters*? The difficulty of answering this question has led some persons to wish for a different meaning to the word *olukah*; but when that is obtained—what are the *two daughters* of the subject thus acquired?—for it does not appear that the following words can spare any one from among them; as the introduction to them leads us to expect three, certainly, and even four, which are all enumerated, and of which no one is redundant. Under this embarrassment, we confess, that as naturalists our ignorance constrains us to relinquish the subject to whoever may possess superior intelligence.

The Syriac and Arabic give the Horse-Leech *three daughters*; but I do not see how that improves the passage. Some would render "Fate has two daughters—viz. Birth and Death; these cry continually, *Give, give*: beside which three other things are insatiable." This rendering supposes the words "the *grave* and the *womb*," to have been inserted twice; of which only one insertion is come down to us.

If *forced* to choose, I would say, perhaps, "*Concupiscence*—clinging-desire, *has two daughters*, 1st, Vanity—pomposity—which is continually soliciting gifts; further magnificence; 2d, Lust, which in its train of expenses is incalculable, and whose requisitions are unbounded. Perhaps, two other daughters might be named, which are no less appropriate to concupiscence, or overweening desire: as, 1st, Ambition, and, 2d, Revenge, &c. &c. but, does *olukah* import *concupiscence*? or what?

It appears doubtful whether this word in this place can mean the *Horse-Leech*: because all leeches drop off after they are filled with blood, which they have sucked. Hence the very phrase quoted from Horace in proof of the manners of the *leech*, leads to an inference contrary to that for which it is usually produced. He says,

Quem vero arripuit, tenet, occiditque legendo;
Non missura cutem, nisi plena cruoris, HIRUDO.

"He sticks like a leech, and will not go till he is full of blood." But Solomon's *Olukah* will not acknowledge itself to be full, or satisfied; but keeps demanding *more! more!* I think I have

read of an insect (*vermes*) which lets the blood it sucks flow through it; so that it is discharged from the intestinal canal as fast as it comes in. Can the *two daughters* of the *Olukah* be two *tentacula*, by which an insect, or worm, answering this description, sucks blood? and if so, what is the figurative reference of the passage? Nothing of this appertains to the *Leech*. In Rosier's Physical Journal for July 1782, p. 284, is a dissection of the *Leech*, by M. Du Rondeau; but no preparation for perpetual blood-sucking appears in its conformation.

VERSE 17.

The eye that mocketh at his father, and despiseth to obey his mother, the Ravens of the valley shall pick it out, and the young eagles shall eat it. For these "sons of the neshet," eagle, vide plate of Unclean Birds, Lev. xi.

The phrase "the Ravens shall prey on the disobedient," implies, that they should be punished with death; and, perhaps, the discriminating appellation "Ravens of the valley,"—or brook side, expresses the place where this execution should overtake the criminals, where those who having early practised disobedience should terminate the career of their iniquities (compare Deut. xxi. 4.) He who disregards parental admonition and advice, will become hardened, will increase his crimes, and will plunge into guilt, whose punishment will cost him his life.

That Ravens were understood to prey on criminals who had been executed, appears from many passages in ancient writers. The Greeks often speak of "throwing to the Ravens." The old man, *Mnesilochus*, in Aristophanes, intreats for a mitigation of his sentence; and that he may not be hanged to serve as food to Ravens. So we read in Horace, Ep. xvi.:

..... non pascas in cruce Corvos,

"Thou shalt not hang on a cross and feed Ravens." So Philostrates, (in Heroicis, and Tzetzes, (Chil. v. cap. 22.) "He is hung on the top of a high pole of fir, that hungry Ravens may feed on him." The loss of eyes is particularly mentioned in this text. Epictetus has the same idea, *Ravens deprive the dead of their eyes*. To which that moralist adds, "it is better to be given up to Ravens, than to flatterers; for those deprive the dead of their eyes, after they can no longer use them; whereas, flatterers fascinate the eyes of those who are seduced by them while living; nor do they only lose their eyes, but also their understanding; such seems to be the sense of the old Greek word, σκορακίζειν, "to cast to the Ravens."

VERSE 24.

There be four things little on the earth—but they

they are wise beyond wisdoms, i. e. exceeding wise. 1. *The Ants, a people not strong; but they prepare in summer their food.* 2. *The Conies, SHAPHANIM, a people not robust: but they place in the rock their houses.* 3. *The Locust, ARBEH, has no king: but they go forth all of them by bands, (or dividing all, each one to itself.)* 4. *The Spider, SHEMMAMITH, with her hands lays hold—grasps, seizes, and she is in the spacious apartments of kings.*

1. For the ANTS, vide chapter vi. 6, 7, 8.

2. For the SHAPHAN, chap. xxx. 26. plate.

3. For the LOCUST, vide Joel ii. plate.

On this passage I ought to add, that Mr. PARKHURST doubts the propriety of the rendering adopted in our translation, that the locust goes forth by bands, "which would imply that the same swarm divided itself into several parties, which does not appear to be the case," Heb. Dict. p. 261. but the reader will observe in our extracts respecting this creature, on Joel ii. that some are said to go forth in detachments, and after having ravaged a district, to return to the main army. Vide p. 4. This therefore justifies our version, and is preferable to the rendering which supposes they divide their prey into many parts, whereof each takes his portion, a conduct that I do not recollect to have seen noticed in the locust. The difficulty lies in their being said to have no king; but this, I conceive, means, such a commanding officer as appoints to each battalion its station, its expedition, and its plunder. Such a director, I presume, the locusts have not; nevertheless, bands of them—detachments, make excursions to right and left, without orders, verbal or written. Are these terms *military*?

Mr. Grey Jackson in his "Account of Morocco," has these words, p. 106. "When the locust is young, it is green; as it grows, it assumes a yellow hue; and lastly, becomes brown. I was informed by an Arab, who had seen the (*Sultan Jeraad*) KING OF THE LOCUSTS, that it was larger and more beautifully coloured than the ordinary one; but I never myself could procure a sight of it."

4. The SPIDER. BOCHART and SCHEUZER labour hard to prove that this creature is not a spider, but a lizard. I cannot say that I am fully satisfied with the arguments for proving it a lizard; such as, that we have another Hebrew word for spider—*okabish*: that the lxx. translate *kalabotes*, which some reckon a fish, but others, with much greater propriety, a lizard. Jerom also reads, "spotted lizard," and the Syriac and Chaldee, express this *shemmamith*, by a word, which is thought to mean a lizard. These, and other remarks, have unquestionably their weight;

but the manners of the creature seem to be hardly applicable to a lizard. These are, 1st, its size, extremely small. 2d, Its being found in the halls, or large apartments of kings. 3d, It grasps with its hands.—1st, The spider is small, and some of its kinds extremely small. 2d, It lodges itself in the ceilings, their crevices, and places out of reach, in lofty apartments, from whence it looks down in full security on its enemies, as the *shaphan* does from within its rocks. 3d, It grasps, or holds tight, with its hands; it lets fall, for instance, a single thin thread, down which it descends, holding with its hands, but if it be molested, it runs up this thread, grasping it tightly as it mounts, and by this means is soon out of sight, and out of danger. This creature, then, answers to the manners of the *shemmamith*. I suppose, the two forefeet of the spider are particularly meant by hands: they are so called in profane writers, as Aristophanes, (*in Ram. Act v.*) "twist with your fingers, spiders, the threads of your web:" and Ovid, *Metam. lib. vi.*:

In latere exiles digiti pro cruribus hærent;

"Thin fingers instead of legs, adhere to her sides."

No doubt, but there are many small animals which inhabit houses, and defy our utmost attention to cleanliness, and our endeavours to disperse them; such, unquestionably, may be the nature of some small kind of lizard in the East: and the same we may say of many insects; but it does not appear, that the lofty apartments of kings are peculiarly pestered with vermin of that kind; and yet it seems to be the intention of the Sacred Writer, to contrast the spaciousness of the dwelling with the minuteness of the creature he is describing: including also, her mode of preserving herself in security, viz. by holding with her hands.

See "Feet, [or hands,] of a Fly." Plate.

VERSES 29, 30, 31.

There be three [each of] which go well, which march, or step, well; yea, four, which are comely in going. 1. A Lion—LAISH, the hero among great animals, and which turneth not away from the face of any. 2. A Greyhound; literally, "which has narrow reins." 3. A He-goat also, TAISH. 4. A King, against whom there is no rising up.

1. For LAISH, vide Job iv. 11.

2. "The NARROW REINS," is certainly an expressive name for a Greyhound: and we have no animal which answers better to this description. The Greyhounds of the East are very light, slender, and fleet.

3. A HE-GOAT. This seems to be the proper rendering of the word, *taish*. Vide Gen. xxx. 35.

4. A King ALKUM. This is a difficult word. Some think this word—*alkum*—signifies *irresistible*; but a King, *irresistible* by his prowess, may have a very indifferent *personal gait*, or going. The Chaldee renders, *a King who stands and speaks in the house of his people*: the Syriac, *a King speaking among his people*: the lxx. *a King making an oration among his people*. To this it is answered, that a *speaking* King is not therefore *majestic in walking*, which is the thing intended. It appears, however, clearly, that all these interpreters read the last word, "*his people*." The passage implies then that this King is seen by, or at, the head of his people:—may it signify, "*in procession, at the head of his people?*" or *fighting at the head of his people?* [vide FRAGMENT, No. ccccix. p. 117, where the King alludes to *his people* at a charge on the enemy.] This is what the comparison requires: for, the *Lion* is heroic, valiant, turneth not away from meeting with any. Vide Hom. Il. xii. 99. and Virgil, En. ix.

..... *ceu sævum turba Leonem*
Cum telis premit infensis, at territus ille
Asper, acerba tuens, retro cedit: et neque terga
Ira dare, aut virtus patitur; nec tendere contra
Ille quidem, hoc cupiens, potis est per tela virosque.

Can it mean a King returning *after* a victory, and marching in full procession, surrounded by his people, to return thanks to the Divine power in his temple? A monarch in such an act, is surely "*comely in going*." This would be still more emphatic, if it were after suppressing a dangerous rebellion; as David after that of Absalom.

The second creature, the GREYHOUND, [but the lxx. read, "*A Cock, strutting gracefully before his females*." The very idea of Milton, speaking of the Cock,

Who to the fields, or the barn-door,
Stoutly struts his dames before.]

is swift. Swiftmess was anciently a prime accomplishment in a hero; and forms a prominent part of the character of Achilles, in Homer. And the *He-goat* opposes himself, at the head of the flock, to all assaults; for, fearful as rams, or goats, may seem to be, when domesticated, they have no small spirit and prowess in their wild state. May this lead us to the idea of the passage? When a Lion is attacked, his activity, his long, or rapid bounds, or his dignity of retreat, is remarkable; [this is heightened, if he be defending his young.] A Cock is not only a graceful creature, but if roused in defence of his family, is bold, spirited, and noble: a He-goat, in defence of his train of females and kids, shrinks from no danger, but firmly leads the way, or stoutly awaits attack: so,

a King, in the duty of resisting aggression, at the head of his guards, when about to risk his life in defence of his country, not only assumes a majestic port, and looks well in the front of his troops; but, the idea connected with his situation, the ardour, the generosity, the valour, it implies, inclines every eye to behold him with all the partiality of affection, and every heart to wish him success, not less from allegiance and sympathy, than from esteem and gratitude.

If this *may* be the sense of the passage, how does the word *alkum* imply it? I can think of no way, unless a word of the *same sound* has an alliance with it in *sense*, (אלקום for הלחם) ALKUM for HALCHUM, *to engage in fighting*. Or, may we refer to הלך, HALAC, *to go, to walk, to proceed*? A King walking (in procession) before his people, as a Lion stalks before his whelps, as a Cock before his hens, as a He-goat leads the way before his kids? The general sense and scope of the passage is much more obvious than the construction, or roots, of the words: on the whole, I rather prefer the martial sense.

CHAPTER XXXI. VERSE 21.

SHE is not afraid of Snow for her household: for all her household are clothed in Scarlet.

It is not easy to say how *Scarlet* is a better defence against *Snow* than any other colour, blue, or brown, for instance; the word rendered *Scarlet*, *shenim*, may signify *doubled* garments, garments *well lined*; and this sense of the word, which is truly the import of its root, is certainly preferable to *Scarlet*; well-lined garments being much better resisters of *Snow*, than the most brilliant *Scarlet* that can possibly be dyed: but, perhaps, it may refer to *duplicature* of garments, two of a sort: worn one under the other; as it appears that the part of the clothing intended is the *lebus*, the lower garment (petticoat:) this sense, then, implies, that her household are *substantially clad*, and may be analogous to the *safeguards* worn by our women when they travel. After all, I should not wonder, if some kind of strong, warm, clothing, was intended: we have a kind among us called *dread-nought*; another, called *everlasting*:—and we know that dresses made of goats' hair, called in Latin *ciliciario*, were worn by country people, and by old men, whom, therefore, the Greeks called διφθεραι: these would be good resisters of *Snow*: and either of these renderings seems preferable to the notion of *scarlet*. [May *shenim*—*double*, be analogous to the Greek, *dimity*, double-corded, as distinct from *scamity*, or *single calico*? Perhaps, the writer means to describe the dress of this matron, herself, as elegant, (vide on Cant. iii. 10.) but the dress of her household as stout and *protective*.]

AN

AN

EXPOSITORY INDEX

TO THE BOOK OF

ECCLESIASTES,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER I. VERSE 7.

ONE Generation is passing away; another Generation is coming;

But the Earth continues permanently:

So rises the Sun, and the Sun sets;

But pants after the place of his rising again:

Moving to the south, and returning to the north,

Around, around, is the course of the Wind;

And over its former courses, again the Wind revolves.

All rivers flow to the Sea, yet the Sea itself is not over-

filled;

To the places whence the Rivers flow, thither they return to flow again.

This passage shews the great knowledge of natural philosophy that Solomon possessed. It describes the daily course of the Sun; the perpetual shiftings of the Wind: and the circulation of the flowing Waters: maintained by the clouds, which receive from the Sea what they pour on the land, whence fountains, and springs, return the waters they received, in streams and rivers to the ocean.

The Earth abideth for ever—i. e. constantly, notwithstanding these fluctuations; *perpetually*, or rather *permanently*: for the word rendered *stand*, signifies permanency; the word *for ever*, signifies only *constantly*, in some cases; as, where the servant who would not go free, shall afterwards serve his master *for ever*;—constantly; during his life, Exod. xxi. 6. The word *æternum* is used by Horace in the same sense, "He shall be eternally a slave, who knows not how to be contented with little."

Serviet æternum, qui parvo nesciat uti.

The next verse, *moving to the south and returning to the north*, may be referred to the declination of the Sun to and from the tropics, marking the solstices of summer and winter. When the Sun is gone southward, into the tropic of Capricorn, he is furthest removed from these northern parts; he

X

is visible but half the time, and has but diminished influence on the earth, &c. compared with his appearance and power, when he is in the tropic of Cancer, or the northern tropic; at which time he makes our summer, and prolongs the light of day. Not, indeed, that any change takes place in the body of the Sun, but that the exposure of the parts of the Earth to the solar rays, is different at different seasons.

But it is usually thought more natural to refer this "north and south," to the Wind mentioned in the following verses. This versatility of the Wind is so notorious, and open to observation, in our country, that nothing need be said on it: but I would not be certain, whether Solomon had not some reference here to the *Monsoons* of the East, which during certain months of the year blow in one direction, and then changing, blow in the contrary direction, during an equal space of time. It is true, that most of the *Monsoons* blow east and west; but winds of the same nature blow in the Red Sea, north and south, and we are certain that Solomon was acquainted with this sea, since he had ports upon it; whence he fitted out his Ophir fleet. We might add, that the Wind in our own country does not blow without some kind of rule: for a long continuance of Wind from one quarter is followed by a long continuance of Wind from another quarter; but, this is subject to so many interruptions, that only those who are very attentive to it, can justly appreciate the remark.

As to the circulation of the Waters, some have supposed, that there are subterraneous communications with the sea, which, like the veins in a body maintain a perpetual motion of streams; and in some cases, I think, it may be allowed, that by percolation, the water of the sea may form springs, (or deep wells) on land; but, generally, I rather presume the fountains are supplied from the clouds, and the clouds are composed of water evaporated from the Sea, to which the streams of fountains, brooks,

brooks, rivulets, and rivers flow. This is not the place to enlarge on this subject; but it is a curious speculation to estimate and measure the quantity of water evaporated from the Earth and Sea, during a day, into the atmosphere; the probable quantity formed into clouds; the same precipitated on the surface of the earth, (during which precipitation, *i. e.* in the heaviest rains, evaporation still proceeds) the same percolating through the earth to form springs, and subterraneous rivers, which pursue their courses, openly or covertly, to the great reservoir and receptacle of the liquid element: which, nevertheless, under all these *dismissions* is never over-filled.

CHAPTER III. VERSE 11.

GOD hath made every thing beautiful in his time. Also he hath set the World in their heart, so that no man can find out the work that God maketh from the beginning to the end.

This passage appears very awkward, as it stands; perhaps it might be better rendered, *The complete whole he (God) maketh beautiful in its time; but especially the present age hath he set in their heart* [imagination, *i. e.* of the sons of men in the former verse;] *because of which man shall not discover that work which God maketh, from beginning to end.* Man sees the operations of God *piece-meal*; and is so occupied by time present, whose importance fills his whole imagination, that he cannot take a comprehensive survey of the works of God; nor view their *entirety*: which would prove apparent blemishes in some parts, to have beautiful results on the whole.

Certainly, this is often experienced in the course of life, as observed and reflected on by individuals; it is also, visible in the history of nations as subject to the government of Providence; and it is notorious in the operations of nature. After some hurricanes and tempests, the atmosphere is more salubrious than before; after the sufferings of winter spring and summer are more abundant. We see and acknowledge these facts, because they occur often in the course of a single life: we should acknowledge the same of other *great* operations, could we determine their proper consequences,—could we behold several complete revolutions; which the shortness of human life forbids—totally forbids.

CHAPTER VII. VERSE 6.

AS the crackling of THORNS under a pot, so is the laughter of a fool.

THORNS—*sirum* “prickly points.” Vide on Psalm lviii. I cannot determine what kind of thorn this is: but rather take it for any *prickle*, of the smaller kind of shrubs. DENON remarks in

his lately published “Travels in Egypt,” that nine out of ten of the Egyptian trees have thorns: it is no wonder, therefore, that among so many kinds of thorns, we are embarrassed to identify those of Scripture.

CHAPTER X. VERSE 1.

DEAD flies cause the Ointment—perfumed oil, or unguent, of the Apothecary (perfumer) to send forth a stinking savour; so doth a small folly him that is esteemed for wisdom and honour—solidity of conduct and character.

FLIES, *zebub*. There is no doubt that this is the meaning of the word, though *zebul* imports the same thing by a play on the word. The Chaldee calls it *debuba*; the Syriac *debaba*; the Arabs *dsebab*, and *zūbab*; and it should seem that the word derives from the Arabic; wherein it signifies “to wander without knowing where to stop;” which well describes the disposition of flies. The *smallness* of flies to produce the effect they do on the most highly scented essences, is compared to the effect of a *small portion* of folly on the character of a person renowned for wisdom.

But some interpreters take the sentiment differently, by separating the verses; “a little folly is more acceptable, and even valuable, than perpetual heights of wisdom and honour, greatness and importance, which never know relaxation, and which incessantly maintain their solemn dignity and consequence:”

*Misce Stultitiam consiliis breuem,
Dulce est desipere in loco.*

VERSE 11.

Surely the Serpent will bite without enchantment, and a Babbler is no better.

We have mentioned the enchantment of Serpents, on Psalm lviii.; but, here a different word is used, *lachash*, which signifies *to whisper*; and therefore, it should seem to indicate a different action from the former kind of enchantment.

Whispering is a kind of *hissing* in a low voice; and this was, I suppose, practised in conjuration of Serpents; beside which Serpents themselves *hiss*, but I would not be certain that all kinds of Serpents *hiss* before they bite; and if the *Nachash* of this passage, bites without hissing, it would give the following as the import of the comparison “Certainly the *Nachash*-serpent bites without giving notice by hissing; but not beyond, or worse, than a Boaster; literally, a lord of the tongue.” Otherwise, “certainly a Serpent bites notwithstanding [or, distinct from] hissing, but not worse than a vain-glorious Babbler; or, blabber of a whisper committed to him in secrecy; or, as the

the same word, *lachash*, signifies both hissing and whispering, perhaps the sense is, "after hissing, the Serpent bites; but not worse than he who having received confidential whisperings afterwards boasts of it,"—and thereby betrays confidence.

CHAPTER XII.

ONE of the finest and most complete moral allegories extant, is contained in this chapter; it is a description of MAN, his mind, and his person, his talents, and his strength, his abilities, and his disabilities; but it is not to be understood without some insight into natural knowledge;

Rejoice, young Man, in thy youth,
And let thy heart (*imagination*) do thee good in the
prime of thy days;

And walk in the ways of thy heart, (*imagination*)
And in the sight of thine eyes:

But be aware, that on account of all this,
God will bring thee into judgment.

Therefore,

Remember thy Creator in the prime of thy days:

While the evil days come not,

Nor the years approach, of which thou shalt say,

"They contain no pleasure for me!"

When the Sun shall be obscured, (*darkened*)

And the Light, and the Moon, and the Stars:

And the thick Clouds return after torrents of rain.

In the day

When the Guards of the House shall tremble,

When the Men of lively vigour totter;

When the Grinders cease, so much are they diminished;

When those who look through the openings are dark,

When the doors are shut in the streets;

When the clatter of the mill is sunk;

And all the Daughters of song crouch low—*dejected*,

But he rises up to the croak of the bird, (*tzippor*)

And surely! from the heights *appear* terrors;

And consternation in the *low* path-way.

And the Almond-tree shall flourish,

And the Locust shall burden itself,

And desire shall be dissipated;

Insomuch, that Man goeth to his long home,

And the mourners make processions in the open streets.

Remember thy Creator,

While the Silver Cord is not (*overstrained*) stretched
beyond its length;

Nor the Golden Bowl is broken;

Nor the Water Pitcher crushed at the conduit;

Nor the Water-Wheel broken at the cistern:

Nor the Dust returning to the earth, in like manner as
it was *originally*;

Nor the Spirit returned to the Supreme who gave that.

Have we not a metaphorical attack, and subversion of a fortress, in this description?—A fortress well provided with guards, well stored with provisions, well supplied with water; but, the guards are in time enfeebled, the stores are exhausted, and the means of procuring water are in time worn out. Let us examine this simile a little closer. 1st, This fortress is attacked in winter time; when the Sun is obscured by clouds, and when torrents of Rain, pouring repeatedly, leave no interval of repose:—and this siege en-

dures till Spring, when the Almond-tree flourishes, when the Locust is at hand, then falls the castle! But, in the progress of the siege, the Guards are enervated, the Heroes (or scouts, or the men for sorties) stagger, the Centinels (*videttes*) look through dark holes from the turrets; or shew themselves darkly, *i. e.* dare hardly shew themselves; the Doors are carefully shut against the enemy, and not opened to receive re-inforcements of friends; the Mill is removed to below ground, that what can be prepared for food, may be done in safety; [or the rattle it makes in circulating ceases to be audible, or is but feeble; because it has lost its former rapidity, and no longer is moved with that spirit and vigour which formerly animated it.] And those who used to sing while grinding the corn, are silent and sad; not now *sitting*, but *prostrate*.

But, if a screaming ravenous bird clamour, that is immediately considered as an omen of evil. The heights seen from the fortress, appear full of enemies, the way-paths around it, thronged by foes. In the meanwhile, the cord which used to draw water up from the deep well is rendered a mere thread, the bowl is worn thin and broken through long use, the water-pitcher has met with accidents, and the wheel with dislocation in its parts: what can the fortress do, but yield?—Time and Death, raze its foundation to the dust.

But though the general nature of this metaphor were admitted to be, what I have stated it, (which is, I believe, wholly new) yet, no doubt, every one of its parts correspond to a part of the human body, which it allegorizes. It may repay our attention to distinguish which they are.

I presume the Sacred Writer begins with the Head, and describes *first*, the infirmities of the Eyes; by means of which, the light no longer operates with its former effects on the *retina* and the optic nerves; but *Witsius* (and I have formerly agreed with him) explains this of the internal light, the powers of reason, and judgment, the failure of memory, and imagination. Some have gone so far as to distinguish the *Sun* as the understanding; the *Light* as the powers of reflection; the *Moon* as the sensitive part of the soul; the *Stars* as the imagination and ideas. SCHEUZER declares for the natural organs of vision.

The Guards of the fortress, I presume, are the arms; the lively Attendants who roam abroad for information, or to descry the enemy at a distance, are the legs; the *Videttes* can only be understood of the Eyes, (which looks like a repetition, if they were mentioned in the first period;) the Door is the mouth (or lips, being *plural*); the Mill is the teeth; the Daughter of Song is the tongue, or voice; the part alarmed at the croak of a bird is the Ear; the Almond-tree that flourishes, is understood

derstood of grey hairs; the Locust is the bending back; the Silver Cord is the spinal marrow, which running down the back bone, gives off nerves to the lower parts; as the Golden Bowl, the container of the brain, does to the upper part of the fabric; the Water-Pitcher, crushed at the conduit is, perhaps, the Stomach, unable to perform its digestions; and the Wheel at the cistern, is the Heart; which no longer circulates the blood.

Part of the propriety and application of this passage may be conceived from the Eastern contrivances for raising water, &c. represented in the Plate of Agriculture, annexed to FRAGMENT, No. ccxxvi. p. 110.

I am at a loss to convey fully my ideas of the aptitude of this description, to those, who have no knowledge of Anatomy. I remember, that, in order to judge of their propriety, I formerly compared these figurative phrases with the subjects themselves. The *golden* Bowl is justly called *golden*; the *silver* Cord is justly called *silver*; the Water-Pitcher, and the Wheel, allude

so strongly to the blood and its circulation, that no comparison can exceed them in energy and propriety.

I hardly know how to quit this subject, without exhorting those, whose peculiar office it is to teach, to acquire a competent acquaintance with the productions of nature. If David studied himself, "I am fearfully and wonderfully made;" if Solomon, as in the instance before us, investigated the composition of the human frame, let no one think that such knowledge is worthless, or that it is inconsistent with piety and wisdom, or that it is less useful now than it was anciently:—much rather let them analyse the emphasis of the following sentiment, in verse 9.

And further still,
Because the Preacher was wise,
He taught the people further knowledge,
Yea, he gave good heed, and sought out,
And set in order—
The Preacher sought to find out acceptable words,
..... upright, words of truth.

AN

EXPOSITORY INDEX

TO THE BOOK OF

CANTICLES,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

AS we have elsewhere, in our attempt to ascertain the arrangement of this series of poetry, endeavoured also to explain some of the subjects of Natural History, which occur in it, we shall not now enlarge on them, or repeat what is there said. The judgment of the public has favoured that exertion with an approbation, to which our best acknowledgements are due, while we indulge our warmest wishes for its continuance.

CHAPTER I. VERSES 5, 6.

I AM BLACK. *Kedar* does not signify the deep blackness of the Negro, or Negress; but that kind of brownness which is the effect of being tanned by the sun. Job says, chap. xxx. 28. "I

went *black* but not by the beams of the Sun." Stephens, the geographer, says, "Kedarites are a nation of Arabia Felix." Suidas places them near Babylon, but the Arab authors do not determine the place of their residence.

VERSE 7.

Tell me, O thou, whom my soul loveth, where thou feedest, &c.

There seems to be something so highly figurative in the exclamation of the Bride, in these verses, that it has never occurred to critics that the speaker, assuming the *metaphorical* character of a Gazelle, or Antelope, inquires for the resting-place of the flock, wherein she also might rest. They have usually supposed, that she makes this inquiry in the

the character of a Shepherdess, meaning to accompany her Shepherd, and to associate with him at the noon time of day, when he would be reposing; but, we have extracted from Sir WILLIAM JONES's Translation of an Arab poet, a passage which not merely compares his mistress to a Gazelle, or fawn, but says, she *strays* from her proper place; and this certainly is the meaning of the bride, "*why should I be as one that turneth aside—a straying, roving, animal—one of THY flock, yet wandering by (rather among,) the flocks of thy companions?*"

"In that tribe was a lovely ANTELOPE, with black eyes, dark ruddy lips, and a beautiful neck, raised to crop the fresh berries of ERAC, a neck adorned with two strings of pearls and topazes: SHE STRAYS FROM HER YOUNG, and feeds with the herds of roes in the tangled thicket, where she browses the hedges of the wild fruit, and covers herself with a mantle of leaves, she smiles and displays her bright teeth, rising from their dark-coloured basis, like a privet-plant in full bloom, which pierces a bank of pure sand moistened with dew. To her teeth the sun has imparted his brilliant lustre, but not to the part where they grow, which is sprinkled with lead ore, while the ivory remains unspotted. Her face appears to be wrapped in a veil of sun-beams; unblemished is her complexion, and her skin is without a wrinkle. Her name was KHAULA—"the tender Fawn."

The answer of the ladies, also, assumes another and more complimentary appearance. "If thou knowest not, O fairest among women, go thy way forth, (rather *pursue thy way*) in the tracts of the flock, and feed thy kids beside the shepherds' tents. i. e. "We cannot answer you in the character of a wandering animal, but in that of governess over animals; you, in your humility, may assume a station which we think too low, and to which we shall not degrade that person whom we esteem as the fairest among women." This *humiliation* in one party, and *cheering* in the other, is perfectly agreeable to other passages of the poem, as in this chapter, verses 1. 5. chap. ii. 1.

VERSE 12.

While the King sitteth at his table, my Spikeward sendeth forth the smell thereof. For SPIKEWARD, vide on chap. iv. plate.

VERSE 13.

My beloved is a bundle of Myrrh—rather a small bag, or purse—for such is the usage of the East, and such is the import of the word elsewhere, as Gen. xlii. 35. "as they emptied their corn-sacks, they found the purses which contained their money," Prov. vii. 20. "he hath taken a purse of money with him." The ladies of the East carry such a small bag in their bosoms night and

day, says Sonini. Vide FRAGMENT ccccxlv. p. 125.

VERSE 14.

A cluster of Camphire—*al HENNA*. Vide on Solomon's Song, as above referred to, p. 127. where a plate is given of this plant.

VERSE 17.

The beams of our house are of Cedar, our rafters are of Fir.

1. CEDAR, the regular word for this tree.
2. FIR. Vide on 1 Kings xix. 4.

CHAPTER II. VERSES 1, 2.

I AM the Rose of Sharon, and the Lily of the Valleys.

As the Lily among thorns, so is my Love among the daughters.

1. ROSE. The lxx. and Jerom, instead of *rose*, render "the flower of the fields;" but the Chaldee calls this flower *jardah*, rose, and is followed by most western interpreters; circumstances seem to determine this to be the *wild* Rose, the uncultivated flower, which, thereby, corresponds to the Lily in the next verse. But beside this Rose, SCHEUZER refers to *Hillerus*, (*Hierophyt.* p. ii.) who rather seeks this flower among the bulbous-rooted plants; saying, that the Hebrew word rendered Rose, *chabatjeleth*, may be derived from *chabab*, he has loved, and *batjel*, a bulb, (or onion) bulbous-root of any flower:—and he declares for the *Asphodel*, whose flowers resemble those of the Lily. They are very fragrant. Homer and Hesiod praise it. Hesiod says it grows commonly in woods; and Homer, *Odyss.* I. xxiv. calls the Elysian Fields, "meads filled with Asphodel;" words which agree with the sentiment of the Hebrew here, if we take *sharon* (as seems perfectly proper) for the common fields. "I am the Asphodel of the meadows (or woods;) the Lily of the valleys," or places not cultivated as a garden is. I prefer, however, the derivation from *chabah*, to hide, and *tjel*, to shade, which would denote a Rose not yet blown, but overshadowed by its calyx; if to this we add the idea of a *wild* rose, we approach, I presume, to the strength of the term; "I am a wild Rose-flower, not fully blown; but enclosed as yet," (partly alluding to her enclosing veil; and partly to her not having as yet submitted to matrimony.)

The Rose in the East is extremely fragrant: it is indeed the Sovereign of the garden; and *Hafiz*, the Persian poet, says, "When the Rose comes into the garden, the violet prostrates itself before it, with its face to the ground." To what degree Roses, were esteemed among the Greeks, may be seen

seen in Anacreon.—But he, no doubt, refers to garden Roses, not to the wild flower, which is that of our text. Vide on verses 11, 12, 13, *ad fin.*

2. LILY. This is the constant rendering of the word *shushanith*, or *susanah*; and needs no enlargement, as the flower is well known among us.

3. THORNS, *coachim*. For *coach*, vide 2 Kings, xiv. 9.

VERSE 3.

As the APPLE-TREE among the trees.—The CITRON-TREE, without doubt: which grows to the size of a moderate timber-tree; and affords a refreshing shade in hot countries.

VERSE 7.

I charge you by the ROES, and by the Hinds of the field.

1. The ROES. *Tjebauth*, rather the *Gazelle*, or *Antelope*, of which there are several kinds. Some are domesticated, (in Upper Egypt, at least, probably elsewhere; and if some of their breeds were so *anciently*, perhaps it may account for the close resemblance in flavour, &c. of the kids dressed by Rebeckah, to the wild venison procured by Esau, Gen. xxvii. 9.)

The *tzebi* is mentioned in Scripture as extremely swift, 2 Sam. ii. 18. as being good food, 1 Kings, iv. 23. which see. It is here called *tzebauth*, says, Mr. PARKHURST, from its *going in troops*. They are very common, and very numerous in the south-eastern countries.

2. The HINDS. Vide on Napthali, Gen. xlix. plate *et al.*

VERSE 9.

My Beloved is like a ROE, or a young HART.

1. ROE, *tzebi*; masculine here, though feminine in verse 7. and the same is—YOUNG HART,

2. *Opher healilim*; this *opher* occurs only in Canticles, and is taken for a name whereby the (early) age of a Stag is expressed. Huntsmen have names for the Stag as he encreases in age, from his birth till his full maturity (a *fawn*, a *calf*, a *pricket*, a *stag*, &c.) and this seems to have been customary in most countries where the chase of that animal was practised. *Bochart* derives this word, *opher*, from the Arabic word *pharon*, which signifies *down*; because, usually, the horns of the young stag are covered by a velvet-like kind of *down*, which is extremely tender: the idea is perfectly correspondent with the scope of the passage, and with the compliment intended by the speaker; (but see this down better *placed*, i. e. on the cheek, by an Arabic poet, on the following verses.)

VERSES 11, 12, 13.

The winter is past, the rain is over and gone;

1. The FLOWERS appear on the earth; the time of the singing of birds is come, and the voice of the

2. TURTLE is heard in our land. 3. The FIG-TREE putteth forth her green figs; and, the 4. VINE with the tender grape giveth a good smell.

There is nothing very difficult in this passage; it is a very poetical and beautiful description of the progress of Spring. Many particulars of it have been well illustrated by Mr. HARMER.

1. FLOWERS—*buds*, *shoots*, &c. in general, whatever bursts into life, and adorns that ground whereon it vegetates.

2. TURTLE; this bird is in some sense, or sometimes, if not always, a bird of passage; as appears from Jer. viii. 7. where it is said to “know its time.” Aristotle says the same, lib. viii. cap. 3.; so does Varro, lib. iii. cap. 5.; and Cicero *de Fin.* lib. ii. The bird is well known among us.

3. FIG-TREE. Vide on Psalm cv. 27.

4. VINES, *gephenim*. This is sometimes called the *wine-vine*, as Numb. vi. 4.; Judges, xiii. 14. The plant is too well known to need enlargement.

We shall add a passage from an Arabian poet, translated by Mr. *Richardson*, *Arab. Gram.* p. 94. by way of shewing what are the principal flowers of Spring in the East; and of affording a mean of comparing the descriptive particulars selected by these poets of the same climate, when alluding to the same season of the year.

“Yes, by the resplendent Spring, and his BLOOMING FLOWERS;

The Narcissus, and the Anthemis, like eyes and teeth;

And the Jessamine, like the colour of a rejected lover;

And the Anemone, like a beautiful virgin advancing in a silken robe;

And the sweet odour-diffusing rain besprinkled Violet;

And the Myrtle, like THE DOWN ON THE CHEEK OF THE FRUITFUL FAWN;

And the Rose approaching with his army (*of thorns*,) whose beauty is all-conquering.”

N. B. This last verse shews the esteem in which the Rose is held in this country. Vide on chap. ii. 1.

VERSE 14.

My Dove in the clefts of the rocks.—

Pigeons are so abundant in the East, that they are by no means confined to dove-cotes, or houses appointed for them; but as Virgil describes them, they dwell in the clefts of the rocks.

..... *columba*

Cui domus, & dulces latebroso in pumice nidi.

Homer describes Doves flying from the hawk, and taking refuge in rocks. Ili. 495. and Od. lib. xii.

VERSE 15.

Take us the Foxes—rather JACKALLS: for which see on Psalm lxiii. plate, and FRAGMENT, No. ccix. where their species are distinguished.

CHAP.

CHAPTER III. VERSE 10.

KING Solomon made himself a Chariot.... the covering of it PURPLE, the midst thereof being paved with love for the daughters of Jerusalem.

It may be seen, that formerly the Editor of CALMET confessed, he did not know in what sense (always) to take the word AREGAMAN, which is usually rendered *purple*; and this rendering is given to it without hesitation, or suspicion that it could bear any other. All dictionaries and lexicons agree in it: nevertheless, that on this subject hesitation might not have been misplaced, may appear after considering a few hints by way of enquiry.

1. The Arabic word *archam* or *arecham* (which is evidently allied to the Hebrew *aregam*) "signifies VARIEGATED, or of different colours:" "VARIEGATED, or of more colours than two or three blended together." This is the usual interpretation of the word among the Arabs; as we learn from BRUCE, Travels, Vol. V. p. 163. though BRUCE himself says, it includes also, the combination "of two colours, as black and white." This, I apprehend, leads us to the precise meaning of the Hebrew word. 1. A combination of two colours, in any pattern whatever; even to the nature of damask linen, of which one figure (square, or, &c.) shews dark, while the other shews light; say black and white: otherwise two colours united into one pigment; *i. e.* PURPLE; which results from the union of blue and red, in commixture; for such is the combination of purple.

2. Threads of two colours, worked mutually into one pattern, whether stripes or crossings, whether black and white, or red and blue, &c. so that the effect of the whole appears superficially varied.

3. Variegation of several colours united into a pattern;—which we illustrate by those of Turkey carpets in general. These carpets have no animals of any kind, nor flowers, nor any living thing portrayed on them, but a composition of divers ornaments, and of divers colours, aiming at producing on the whole, a lively, or splendid effect. This I think illustrates the import of the Hebrew word *aregaman*. We shall examine a few passages wherein it may be useful to give it this import.

Numb. iv. 13. "And they (the Levites) shall take away the ashes from the altar, and shall spread a PURPLE cloth thereon."—The altar being a heavy utensil, and often soiled by the fat, &c. of sacrifices, &c. offered on it, shall be wrapped in a strong, solid covering—a Turkey carpet—or VARIEGATED envelope—*i. e.* an ornamented though

strong *surtout*. This seems by no means an unnatural, or improper covering to such a bulky subject.

Judges viii. 26. "Golden ear-rings,—ornaments—collars—and VARIEGATED raiment,"—raiment of variegated colours composed into a pattern—worn by the kings of Midian.—This is precisely according to the taste of personal decoration in the East; and might almost be rendered "BROCADED vestments," in modern language.

2. Chron. ii. 7. "Send me now a man cunning to work—in VARIEGATED colours and in crimson and blue." This can hardly mean *purple* here; since *purple* is a mixture of crimson and blue; but *variegation* of colours suits the passage completely.

Esther i. 6. "Railed divisions"—in the court of the palace "hung with linen, and VARIEGATED patterns," *i. e.* CARPETS "upon railings of silver pillars, and columns of white marble." (Vide on this passage the plate.) Could any thing be more proper, or more magnificent, or more *customary* than this use of *carpets*, to hang upon the divisions made by the cross-rails which accompanied these pillars and columns?

Prov. xxxi. 22. "She maketh herself coverings of *tapestry*: her clothing is silk and *brocade*; *i. e.* *variegated* with sundry colours.

[By the bye, as *tapestry*, according to our application of the word, is rather heavy cloathing for a warm country, I would wish to read more literally—

"Woven works—*marbudim*—she makes to herself of *cambric*—*linen*; [*i. e.* figured.]

And *variegated* (*brocade*,) is her lower garment (*petticoat*.)"

But I think this may be rendered still more correctly, if we advert for the sense of these *marbudim*, to chap. vi. 16. "I have decked my bed with coverings of *marbudim*, *tapestry*;"—which appears to be used on the upper part of the bed.—This, I say, gives this passage a more correct parallelism.

Her UPPER GARMENTS (*gown, robe*,) she makes of fine *cambric*, or, &c. wrought in a pattern: And of BROCADE her lower garment (*petticoat*:)

which is much as we have seen British ladies, (nor is this their only resemblance to this excellent portrait of Solomon) clothe themselves in muslin, or *cambric* robes, *sprigged*, or, &c. by their own hands,) worn over silk or satin *petticoats*. The taste and elegance of which combination, seems to have captivated the Hebrew Solomon formerly, as much as it has lately delighted British beholders. For the robe, vest, and drawers of Eastern female dress, vide on Isaiah iii. 18. Plates.

It should seem too as if this *brocade* was rather restricted to the inner, or lower garment: for so

we

we find, Dan. v. 7. the king promises whoever explained the writing shall be clothed in *scarlet*;" (*areguna*, the same word as elsewhere is rendered *purple*)—"his lower garment shall be of *VARIEGATED*" pattern—*i. e.* *brocade*. (Vide *ante*, the dress worn by the kings of Midian.) This is nearly the dress worn by Mordecai, as prime minister, or Grand Vizier, Esther viii. 15. "and Mordecai went out from the presence of the king in royal apparel, of blue and white;—rather—in (royal lower garments, or) lower garments of royal blue and white, and a great crown of gold, and a vest of fine cotton, with a *VARIEGATED*"—border, perhaps—whether of flowers, or of any other pattern embroidered on it. The reader will observe the distinctions marked by the differences between these dresses of office; the master of the Magi was not the Grand Vizier, he was only the *third* ruler in the kingdom.

These passages are sufficient to shew that the sense of *purple* is not *always* implied in the Hebrew word *aregaman*; but a mixture, or combination of colours, of which *purple* is only one distinction.

If the word *aregaman* means a weaving of many different colours, or even of two colours only, then we were not very far from the mark, when we proposed the sense of a *CARPET*, for the *aregaman* which covered the floor of the nuptial palanquin of Solomon in this passage: which, as it was a love-gift from the daughters of Jerusalem, we shall compare to those ornamental hearth-rugs, worked in patterns, with crewels, with which our young ladies have lately amused themselves, and adorned the hearths of their drawing-rooms; these have the solidity, the beauty, the durability, and the ornamental effect of the most costly carpets;—such have been worked too for the purposes of coach-carpets, by the noblest ladies of England;—such might be presented to king Solomon himself!—there is but one objection; they are too handsome to be trod on;—however, Solomon in the palanquin did not *stand*, but *sit* on them; and if the works of the ladies of England are not too valuable for their coaches, no good reason, I am sure, can be given why those of the daughters of Jerusalem should be ill applied in decorating and completing the equipage of Solomon.

Though I have used the word *brocade* to convey the idea of *variegation* by colours into a pattern, yet, the word *tissue* may more accurately suit the description of this *aregaman*; for, as *areg* is from *regem* (*aregem*) to weave, so is *tissue* from the French *tisser*, *tissu*, to weave; and hence *tisserand*, for a weaver, &c. which is perfectly analogous to the derivation of the Hebrew, or rather Chaldee word; and we find by these remarks, our former

opinion confirmed, that the city *Arech* of Babylonia, was that famous city which contended with Athens in the art of weaving; and from *Arech* was metamorphosed (*à la Grec*) into *arachne*, the spider, as Ovid relates in his *Metamorphoseon*.

The same train of reasoning applies to the tresses of the bride, chap. vii. 5.

Thine head-dress upon thee is like *Carmel*,
And the tresses of thine hair are *plaited* like *well woven*,
well figured tissue—*aregaman*;

i. e. They are extremely numerous (some ladies have *an hundred and ten* tresses, says Lady Montague;) they are of great length, (reaching low down the back;) they are braided, and implicated in the most becoming manner, and to the happiest effect—"the king is inextricably entangled in these intricacies," which are wrought one into another with the most attractive skill.

CHAPTER IV. VERSE 11.

THY lips—drop the honey-comb. Vide on Prov. v. 4, 5.

VERSES 13, 14.

1. A Garden enclosed is my sister, my spouse; 2. a Spring shut up; 3. a Fountain sealed. Thy plants are an orchard of, 4. Pomegranates, with pleasant fruits; 5. Camphire; with 6. Spikenard; 7. Spikenard; and 8. Saffron; 9. Calamus; and 10. Cinnamon; with all trees of, 11. Frankincense; 12. Myrrh; and, 13. Aloes, with all the chief Spices.

1. GARDEN. A hint on the character of gardens in the East may be agreeable, on this passage. The comparison of a lady to a garden, is not only a frequent, but an elegant compliment in the East.

Gardens in the East, are little other than verdant forests. Our English plantations are nature regulated and assisted by art; but those of Asia are more shady, more covert, than our own, by reason of the great heats of the country. So DE LA MOTTRAYE describes the Grand Seigneur's garden at Constantinople, as "a heap of groves, and a forest of cypresses, and other great trees, which are always green." Vol. I. p. 178. Not only do the windows, &c. of palaces open into their gardens, for the sake of beholding their verdure; but in these gardens they often dine: so says *Busbequius*, Trav. p. 79. "Haly Basha, deputy to the Grand Vizier, treated the Persians with a sumptuous dinner, which he made in his garden." And correspondent to this enjoyment should seem to have been the banquet house—*kiosk*, or pavilion of Esther, chap. vii. 7. for we read, that "the king arising in his wrath from the banquet of wine into the palace garden;" the word *went* is added by our translators.

translators. But if this *kiosk* stood in the garden, he was no sooner out of one, than he was in the other. "The gardens," says lady MONTAGUE, Letter xxxii. "*are enclosed with very high walls.* There are none of our parterres in them, but they are planted with high trees, which give an agreeable shade. In the midst of the garden is a *chiosk*, i. e. a large room, commonly beautified with a fine fountain in the middle of it. It is raised nine or ten steps, and enclosed with gilded lattices, round which, vines, jesamines, and honey-suckles, make a sort of green wall. Large trees are planted round this place, which is the scene of their greatest pleasures, and where the ladies spend most of their hours, employed by their music or embroidery." This extract may almost stand as a comment on the passage before us; only we must add to the idea of a garden, that of a fountain in such a garden; and around that fountain, the jesamines and honey-suckles of lady Montague, or the orchard of fragrant plants of Solomon. To shew the value of shady and great trees in the East, we add an extract from Baron DU TOTT, Vol. I. p. 63.

"Above all, they admire the shade of great trees, and will to preserve them, even disregard the convenience of their houses. I have seen a fine old elm, more ancient than the proprietor, preserved by the architect in the midst of a gallery which it crossed to spread the shade over the roof. All the trees of an estate are left in the same order they are found; and the plan of any building is commonly regulated by them, be they placed how they will; and this, no doubt, because in so warm a climate the shade of great trees is necessary."

Several passages in Scripture coincide with this.

Mahomet, being an Arab, was so sensible of the value of shade in a country of widely extended plains, that he has made it one of the enjoyments of his paradise. He says in the chapter Nassa, "*We shall place the faithful in a shade deep, and everlasting.*"

2. A SPRING shut up. After what the reader has seen on the nature of gardens, and what has been noticed by him on various occasions, respecting the importance of water in the East, to the purposes of vegetation, and to the sustenance indeed of plants, whether useful or ornamental, nothing need be added on the subject of this spring, or on the following word, (3.) FOUNTAIN. That springs and fountains were shut up, appears from the history of Jacob, when entering Padan Aram; and that they were personal property, appears from the struggles they occasioned in the days of Abraham, Isaac, and Moses. A spring, and a fountain, in a royal garden, which garden was itself inclosed, might be expected to maintain its privacy; and

this is allegorically converted into a compliment on the modesty, the chastity, and the virgin reserve of the bride, as in the following apologue:

"Feirouz, a vizier, having divorced his wife on suspicion of infidelity, her brothers applied for redress in the following figurative terms, "My lord, we have rented to Feirouz a most delightful GARDEN, a terrestrial *Paradise*; he took possession of it, ENCOMPASSED with high walls, and planted with the most beautiful trees, that bloomed with flowers and fruit; he has broken down the walls, plucked the tender flowers, devoured the finest fruit, and would now restore us this GARDEN, robbed of every thing that contributed to render it delicious when we gave him admission into it." *Miscellanies of Eastern Learning*, Vol. I. page 12.

4. POMEGRANATES. Of this tree I shall extract the description from Dr. WOODVILLE'S *Medical Botany*, Vol. I. p. 158.

"PUNICA GRANATUM, *pomegranate-tree*.

"*Class* icosandria, *Ord.* monogynia. *Lin. Gen. Plant.* 618.

"*Ess. Gen. Ch. Cal.* 5-fidus, superus. *Petala* 5. *Pomum* multiloculare polyspermum.

"This small tree rises several feet in height: it is covered with a brownish bark, and divided into many small branches, which are armed with spines; the leaves are oblong, or lance-shaped, pointed, veined, of a deep green colour, and placed upon short foot-stalks; the flowers are large, of a rich scarlet colour, and stand at the end of the young branches; the corolla is composed of five large roundish slender petals, with narrow claws, by which they are inserted into the calyx; the calyx is large, thick, fleshy, tubular, of a brownish red colour, and divided at the extremity into five-pointed segments; the filaments are numerous, short, bent inwards, furnished with yellow antheræ, and attached to the calyx; the germen is roundish, and supports a simple style, of the length of the filaments, and terminated by a globular stigma; the fruit is about the size of an orange, and crowned with the five teeth of the calyx: the rind is thick and tough, externally reddish, internally yellowish, filled with a red succulent pulp, [this is gratefully acid, somewhat like that of oranges,] contained in transparent cellular membranes, and included in nine cells, within which, numerous oblong angular seeds are also lodged. This shrubby tree is a native of Spain, Italy, Barbary, &c. and flowers from June till September.

"The cultivation of this tree in England is first to be dated from the time of Gerard, in 1596; and though its fruit seldom arrives to a state of perfection in this country, yet the large and beautiful
Y scarlet

scarlet flowers which it produces, still render it a desirable object of ornamental gardening;" [the double flowered sort more especially, makes a very beautiful appearance.]

Some of these rise to 18, or 20 feet.

5. CAMPHIRE, *al-HENNA*. Vide as before referred to.

6—7. SPIKENARD. Vide the plate.

8. SAFFRON is the kiln-dried *stigmata* of the CROCUS: a flower well-known in our gardens. The impropriety of using the name of the artificial preparation instead of the flower in its natural state, is evident. The *crocus* is of Class iii. Order 1. of *Linnaeus*. *Triandria monogynia*.—It is so common as to need no description.

9. CALAMUS *aromaticus*. Vide on Exod. xxx. 23.

10. CINNAMON. I shall extract Dr. WOODVILLE's account of this spice. Med. Bot. Vol. I. p. 80.

"*Laurus cinnamomum*, cinnamon-tree.

"Class enneandria. Ord. monogynia. *Lin. Gen. Plant.* 509.

"*Ess. Gen. Ch. Cal. o. Cor. calycina*, 6 partita. *Nectarium glandulis* 3, bisetis, germen cingentibus. *Filamenta interiora glandulifera. Drupa* 1-sperma.

"This valuable and elegant laurel rises above twenty feet in height; the trunk extends about six feet in length, and one foot and a half in diameter; it sends off numerous branches, which are covered with smooth bark, of a brownish ash colour; the leaves stand in opposite pairs upon short foot-stalks; they are of an ovalish oblong shape, obtusely pointed, entire, firm, from three to five inches long, of a bright green colour, and marked with three whitish longitudinal nerves; the common peduncles grow from the younger branches, and after dividing, produce the flowers in a kind of paniculated umbel. The petals are six, oval, pointed, concave, spreading, of a greenish white or yellowish colour, and the three outermost are broader than the other; the filaments are nine, shorter than the corolla, flattish, erect, standing in ternaries, and at the base of each of the three innermost, two small round glands are placed; the antheræ are double, and unite over the top of the filament; the germen is oblong, the style simple, of the length of the stamina, and the stigma is depressed and triangular: the fruit is a pulpy pericarpium, resembling a small olive of a deep blue colour inserted in the corolla, and containing an oblong nut.

"The true cinnamon-tree is a native of Ceylon, where it grows common in the woods. Its cultivation was first attempted in this country about the year 1768, by Mr. Philip Miller, who observes, 'that the cinnamon and camphire-trees are very

near akin;' and that if the berries of these trees were procured from the places of their growth, and planted in tubs of earth, the plants may be more easily reared than by layers, which require two years or more before they take root.

Ray seems to think that the *cassia cinnamomea* of Herman, the *cassia lignea*, and the *cassia fistula* of the ancient Greek writers, were the same, or varieties of the same species of plant. [It is necessary to observe, that the ancient signification of these names is very different from the modern. The younger branches of the tree, with the bark covering them, were called by the Greek writers *κινναμόμων*, cinnamomum, and sometimes *ευγοκασία*, or cassia lignea; but when they were divested of their bark, which by its being dried became tubular, this bark was denominated *κασία στυγξ*, or cassia fistula.—But as in process of time the wood of this tree was found useless, they stripped the bark from it, and brought that only; which custom prevails at this day. See Account of the cinnamon-tree by Dr. Watson, Phil. Trans. vol. 47.] An enquiry of more importance is, whether the cinnamon of Ceylon is of the same species as that growing in Malabar, Sumatra, &c. differing only through the influence of the soil and climate in which it grows, or from the culture or manner of curing the cinnamon. Mr. White and Mr. Combes, who have investigated this subject with considerable attention, agree with Gracinas, and determine this question in the affirmative. [But Mr. White, with the assistance of Dr. Matty, carefully compared the specimens of the cinnamon-tree, (commonly called cassia) which he had from Sumatra, with those from Ceylon, preserved in the British Museum, which were the collections of Boerhaave, Courteen, Plukenet, and Petiver, and found the difference so inconsiderable, as fully to justify his opinion. And he observes, 'if any conjecture can arise from hence, it may be, that the cinnamon of Ceylon was formerly, as well as that of Sumatra and Malabar, called cassia; but that the Dutch writers being acquainted with the excellent qualities which the ancients ascribed to their cinnamon, chose to add the name of cinnamon to that of cassia; and in process of time they have found the name of cinnamon more profitable than that of cassia, by which we chuse to call our canella, to our national loss of many thousands a year.' (Phil. Trans. vol. 50. p. 387.) How far the reasoning of Mr. White is well-founded, we leave to the judgement of others; it may, however, be remarked, that his opinion is not a little supported, from the consideration that the cinnamon-plant varies exceedingly, even in the island of Ceylon, where Burman collected nine different sorts, and Seba actually describes ten. "The

"The use of the cinnamon-tree is not confined to the bark, for it is remarkable that the leaves, the fruit, and the root, all yield oils of very different qualities, and of considerable value: that produced from the leaves is called oil of cloves, and oleum Malabathri: that obtained from the fruit is extremely fragrant, of a thick consistence, and at Ceylon is made into candles, for the sole use of the king; and the bark of the root not only affords an aromatic essential oil, or what has been called oil of camphor, of great estimation for its medical use, but also a species of camphor, which is much purer and whiter than that kept in the shops.

"The spice so well known to us by the name of cinnamon, is the inner bark of the tree; and those plants produce it in the most perfect state, which are about six or seven years old, but this must vary according to circumstances.

"The bark, while on the trees, is first freed of its external greenish coat; it is then cut longitudinally, stripped from the trees, and dried in sand, till it becomes fit for the market, when it is of a reddish yellow, or pale rusty iron colour, very light, thin, and curling up into quills or canes, which are somewhat tough, and of a fibrous texture. It is frequently mixed with cassia, which is distinguished from the cinnamon by its taste being remarkably slimy. This bark is one of the most grateful of the aromatics; of a very fragrant smell, and a moderately pungent, glowing, but not fiery taste, accompanied with considerable sweetness, and some degree of astringency."

Vide on Exod. xxx. 23. &c.

11. FRANKINCENSE. Vide on Exod. xxx. 34, 35.

12 MYRRH. Vide on Exod. xxx. 25.

13. ALOES. Vide on Num. xxiv. and Prov. vii. 17.

CHAPTER V. VERSE 4.

MY beloved put his hand by the hole.—Vide the LOCK, plate.

CHAPTER VI. VERSE 10.

*WHO is she that looketh forth as the morning...
Terrible as an army with banners?*

The following are the words of SCHEUZER: "I should have here a proper opportunity of describing the empurpled rising of the *Aurora*, or day-break, of the light of the sun, and of the moon, and especially of that light called *Aurora Borealis*, which, by its streams, and the columns of fire it diverges on all sides forms an image sufficiently expressive of an army, and even traces the likeness

of two armies charging each other. Symmachus renders, "terrible with her troop;" "illustrious, like those which are magnified;" or as the fifth and sixth edition of the lxx. read, "terrible among those which are magnified." Vide the supposition of a COMET, to which these renderings partly agree on *Solomon's Song*, New Arrangement: in the FRAGMENTS annexed to CALMET's Dictionary of the Holy Bible.

VERSE 11.

I went down into the garden of NUTS—Dr. SHAW thinks these were WALNUTS: both *nuts* and *walnuts* are too well known to need description. For *Pomegranates*, vide on Chap. iv. 13.

CHAPTER VII.

SOME assistance toward understanding the parts of dress here described, may be obtained from our plates to Isaiah iii. 18. but much more from those to the New Arrangement of *Solomon's Song*, in the FRAGMENTS already referred to.

VERSES 7, 8.

PALM-TREE. This is a very tall, upright, rising, tree, whose leaves are at its head, and whose fruit (*the dates* of the shops,) hangs in clusters from its top. There are several kinds; some rise so high as 60, 80, or, says Denon, even 100 feet. The leaves in which our grocers receive their figs, &c. enclosed are those of a species of palm.

VERSE 13.

MANDRAKES. Very great are the difficulties of interpreters on the plant intended by the Hebrew word *dudaim*. Without repeating their conjectures, we shall content ourselves with saying, that the word signifies "the breast of a woman," and that there is a species of melon so called in Persia to this day, "nearly the figure of the *coloquintida*, colour mingled red and yellow, and of a very agreeable odour." The Syrians and Egyptians call it *shemama*, and the Persians the same (*chamama*) i. e. *woman's breast*: and possibly this alludes also, to the fulness of the *maternal* breast, as *amma* may be allied to the Hebrew *amma*, "mother," and *sham* to the Hebrew *sem*, or *shem*, "aromatics, sweet-scented drugs—spices;" this agrees with the character of this plant for fragrance, which is *held in the hand by way of nosegay*: and the Persians call it "perfume of the hands." Vide Fragment on *Solomon's Song*. p. 220.

CHAPTER VIII. VERSE 10.

I Am a WALL, and my breasts like TOWERS.—Vide the plate; and add to the remarks there made
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made the notice taken by Juvenal of the breasts of the Egyptian women, of whom he says, "Who is astonished at the great size of the swelled necks (goitres) of the Alps? or to see a woman in Meroë

(in southern Egypt) with her breasts larger than the child which is sucking them?

*Quis tumidum guttur miratur in Alpibus & quis
In Meroë crasso majorem infante papillam?*

AN

EXPOSITORY INDEX

TO THE BOOK OF THE PROPHET

ISAIAH,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER I. VERSE 18.

THOUGH your sins were as SCARLET, they shall be white as snow:

Though they were red like CRIMSON they shall be white as wool.

The word for scarlet is, *shenim*, the "double;" either 1. double dyed, as in Horace, Carm. lib. ii. Ode 16.

..... *Te bis Afro
Murice tinctæ
Vestiunt lanæ*

"Thou art clothed with the double dyed purple of Africa:" and Ep. xii.

Muricibus Tyriis iterata vellera lanæ.

"The wools with Tyrian purple double dyed."

Pliny, also, lib. ix. cap. 16. mentions "Tyrian purple twice dyed, at a great expence." Or, 2. This word may signify a worm of some kind, which doubles on itself; or, an insect which yields this colour, scarlet. But the general opinion is, that the second word crimson, *tolaath*, denotes the insect that yields this colour; the *kermes*, which is much the same as the cochineal insect, now brought to us from Spanish America, and used in dyeing our scarlet cloths.

We are greatly at a loss to account for the Tyrian purple, which is said to have been extracted from a shell-fish, the murex. That the murex (we have also shell-fish on our own coast of the same properties) was capable of yielding a very intense purple, we know; but the quantity of it is, and must have been, so very small, that it seems incapable of dyeing a piece of cloth in a season.

I am unwilling to think this prophet repeats an idea so closely as it here recurs, by making the

first word the colour produced by the worm, the second the worm itself. May double dyed be taken for any colour so produced? And the second clause—"Yea, even double dyed from the deepest of dyes, that produced by the cochineal?" Or, may the first be the colour produced by the shell-fish; the second, that by the insect? Two kinds of colour should rather be meant than one, though of the same class of tints.

CHAPTER II. VERSE 20.

MOLES, *chapharpharoth*. Vide plate of the Mole. Lev. xii. 29.

CHAPTER V. VERSE 28.

THE hoofs of the horses are as flints.

WINKLEMAN observes, that he does not meet in any of the antique (cavalry) statues remaining any shoes on the hoofs of the horses; and that, where such a thing occurs, it is a modern reparation. Certainly, before the shoeing of horses with iron was adopted, the property of a hard hoof was a great commendation to a horse (Vide Isaiah, v. 28.), as thereby he was the better qualified to travel on a hard road, and long at a time. Homer, in the Odyssey, calls such horses "very hard footed." *Absyst*. cap. 106, calls them "sound footed," and "strong footed," in opposition to those which are "tender-footed." Homer goes so far in the Iliad, as to call horses "brazen-footed." But this leads to a suspicion, that they were occasionally shod with (copper, or) brass. The absence of shoes, however, gives the true sense of the passage, Amos vi. 12. "Can horses run upon the rock?"

Mr. Jackson in his "Account of Morocco," 4to. Lond. 1811, says, page 76. The Arabs signify the soundness of the feet of grey horses, by an Arabian adage, which indicates that if a cavalcade be passing through a stony country, the grey horses will break the stones with their feet; this opinion appears founded on experience, for in the Atlas mountain, in some parts of Suse, and in all harsh stony districts, we find a much greater proportion of grey horses than of any other colour; their feet are so hardy, that I have known them to travel two days' journey, through the stony defiles of Atlas, *without shoes*, over roads full of loose broken stones, and basaltic rocks."

CHAPTER VII. VERSE 18.

IN that day the Lord shall hiss for the FLY, Zebub, which is in the uttermost parts of the rivers of Egypt; and for the BEE which is in the land of Assyria, and they shall come, and shall rest, all of them, on the desolate valleys, and in the holes of the rocks, and on all thorns, and on all bushes.

We have here two creatures which appear to be of a very formidable nature, though of diminutive size: 1st, *Zebub*, or the FLY; 2d, *Deburah*, or the BEE. They are the usual words for each; yet, as the Fly of Ethiopia is the most formidable of flies, so we may, I think, presume, that the Bee of Assyria is equally formidable among bees. The *Zimb*, or fly of Ethiopia, has been described by BRUCE, and we have applied his description to this passage in FRAGMENTS, No. LVI. CCLXXXVI.

For the Bee, I have not been so fortunate as to meet with any appropriate information: I imagine it should be a creature, not of Mesopotamia, but of very far east: for, though I doubt not that *Seria*, *Seriad*, or, "the Land of the Hive," refers to the first swarming of the human race, yet it is by no means impossible, that this also was the peculiar country of the bee; and where that insect, in its wild state, acquired the greatest perfection. There is great confusion in the geographical application of the names *Seria*, *Seriad*, *Syria* and *Assyria*.

I suspect, also, that we must appropriate to each creature its situation here described, for the *Zimb* does not inhabit "holes of the rock," as the bee does; and, I presume, we may refer the two first particulars to the bee: "it shall rest in desolate or forsaken valleys, and in holes of the rocks;" but—the fly shall "settle on thorns and bushes."

It remains now that we notice the words (נחללים, *notjulum*) rendered *thorns*; and (סללים, *nehelelim*) rendered *bushes*. I incline to think, that Mr. PARKHURST (or rather BATE) has well explained this last word, of "pasture-grounds, where flocks are tended," because, we learn from BRUCE,

that the *Zimb* appears on the "fat earth," and valleys, and forces the shepherds to drive their flocks to the Desert, where this fly does not come, in order to preserve them from his ravages. Neither of those writers has perceived this application of the word, though it perfectly suits the passage and the natural history of the subject. Says PARKHURST, "it must be confessed, that as a derivative from *nahal*, with the 1 radical, it might admit of this sense;" which, for want of distinguishing between the actions attributed by the Prophet to the bee and the fly, he hardly knows how to admit.

BRUCE says, Vol. V. p. 189, "Providence, from the beginning, it would seem, had fixed its habitation (that of the *Zimb*) to one species of soil, being a black, fat earth, extraordinary fruitful." "The shepherds preserve their immense herds of cattle by conducting them into the sands, beyond the limits of the black earth, and bringing them back again when the danger from the insect is over." I presume, then, that this *fat earth* is the import of the Hebrew word here, which our translators have rendered *bushes*.

[Mr. Bruce's account of the *Zimb*, having been doubted of by Lord Valentia and other travellers into the East of Africa, it may not be amiss to remark that Mr. Jackson has given a figure of the beetle, having a long horn proceeding from its nose, which in the West of Africa, perforates the Gum Ammoniac plants. Its figure closely resembles that of Mr. Bruce's *Zimb*.]

May this lead us to the import of the foregoing word, rendered *thorns*? It is, indeed, so understood by the Chaldee, and the root does not occur in Hebrew. Bishop LOWTH renders "thickets," referring, I suppose, to the root *otz*, a tree. I would rather, if it might be, refer to the root *netjeh*, in which the *n*, though radical, is omissible, and consider it as implying "flowery meads;" which would agree perfectly with the nature of the "extraordinary fruitful black earth" associated with it, and, by opposition, with the desolate valleys and rocks of the former lines. In fact, as three out of four subjects mentioned are *places*, this also, by parity, should be a *place*, not a *plant*. This would lead to the following distribution of these verses, according to their references to each animal, and its proper situation.

In that day,
The Lord shall hiss for the Fly (the *Zimb*)
Which is in the uttermost parts of the rivers of Egypt,
Which shall come and settle on all flowery meads,
And on all fruitful pastures.
And for the Bee,
Which is in the land of Assyria,
Which shall come and settle on abandoned valleys,
And in the crevices (or clefts) of the rocks.

These situations seem to correspond correctly
to

to the nature of the insects to which they are referred.

CHAPTER X. VERSE 14.

MY hand hath found as a nest the riches of the people: and as one gathereth eggs that are left, have I gathered all the earth; and there was none that moved the wing, or opened the mouth, or peeped.

There are not many birds which forsake the nest while their eggs are in it: but, if any bird was sitting on her eggs, she would cry out on their being taken away. I have thought, therefore, that this nest might be that of an ostrich, which bird occasionally quits her nest, and in her absence the eggs might be found, and carried off without any resistance or any alarm.

I do not know how a better word than *peeped* could be substituted here; but it gives an equivocal idea, as if *prying*, inspection, was intended, whereas it imports the outcry of the parent bird at the spoliation of her nest. Might it be spelled *pipped*? from the root of our word, "to pipe"—to cry out—to give notice. LOWTH reads, "chirped," but that seems too cheerful a term.

A remarkable instance of the quiet sufferance of birds in respect to their eggs, occurs in Von Buch's Travels in Norway, p. 130. He describes a number of small uninhabited islands called *Vars*. Numberless sea fowl brood here: they are valuable on account of their eggs. "When the possessors of the *Var* come in quest of the eggs, *the bird knows them, and remains quiet*; . . it flies to a short distance, looks quietly on the spoliation, and returns, when they are gone. But foreign vessels and strangers frequently fall upon the *Var*; and rob the place—when all the birds, to the number of many thousands, rise at once, and fill the air with the most frightful and lamentable cries."

CHAPTER XI.

THIS chapter contains one of the most beautiful of passages; the general reference of the peace and harmlessness which it describes, we have touched on elsewhere: we shall now only attend to the animals it introduces.

1. *The wolf shall dwell with 2. the lamb; the 3. leopard shall lie down with 4. the kid; 5. the calf and 6. the young lion, and 7. the fatling together, and a little child shall lead them; 8. the cow and, 9. the bear shall feed; 10. their young ones shall lie down together; and 11. the lion shall eat straw like 12. the ox; and 13. the sucking child shall play on the hole of 14. the asp; and the weaned child play on 15. the cockatrice den.*

1. The WOLF, *zahab*. Vide on Gen. xlix. 27.

2. The LAMB, a *young* lamb, male or female. The idea is that of non-resistance.

3. The LEOPARD, *nimmer*; the *spotted* panther, perhaps, as being the most considerable of this kind. But may it not be the kind of leopard used in hunting? for we seem to have such an allusion in the name *Nimrod* (*nimmer-od*) Gen. x. 9. which is explained of the "mighty hunter before the Lord;" i. e. he acted in the sight of the Lord, as a hunting leopard acts (with great agility, springing, leaping) before his master. The idea of this active animal lying down with the kid, is strong: otherwise this word may be taken to denote the leopard kind in general.

4. The KID, a *butting* young animal; therefore an advance on a *lamb* of the foregoing versicle, which referred to a lamb too young to *butt*, at least too young effectually to resist.

5. The CALF, a further advance, as the calf is stronger than a kid, and more capable of defence if attacked. The word for calf is unusual: perhaps our word, *steer*, i. e. young bullock, would answer it. With this, *steer* is associated.

6. The YOUNG LION, *cephir*; which is a proportionate advance also beyond the leopard of the former article.

7. The FATLING, the same, I presume, as the "fatted calf," of which we read elsewhere in Scripture.

8. The LITTLE CHILD, needs no explanation.

9. The COW, *parah*, see on Gen. xxxii. 15.

10. The BEAR, *dub*, see on 2 Sam. xvii. 8.

There should have been an insertion of the word *together*, here, which seems to read double in the Hebrew.

The cow and the bear shall feed *together*;
Together shall their young ones lie down.

11. The LION, *ariah*, see on Gen. xlix. 11, 12.

12. The OX, *bekar*. As *oxen* were forbidden under the ancient dispensation, this should be rendered "*beeve*," a young bull. As the cow was matched with the bear (*she*-bear, no doubt, in this place, as her young are hinted at), so the stronger animal, the bull, is matched with a lion; which, also, by parity, should be a strong, *male* lion.

13. The SUCKING CHILD. The idea is that of the most helpless infancy. A progress in importance is here evidently intended from the young of animals (cow, or ewe) to the young of the human race; and it is combined with a proportionate intensity of hazard—the poison of the *peten*.

14. ASP, *peten*, see on Job. xx. 14. Beside this, I think I may refer the *batæn* of the Arabians, at this day, to the *peten* of the Hebrews, with little risk of error. Mr. FORSKAL describes it as "spotted with black and white, about one foot in length, and nearly half an inch in thickness;

ness; it is oviparous; its bite is instant death." This is all that is said by that naturalist on this serpent; we wish, therefore, for further description of it, especially if it be, as I suppose, a creature whose properties are so often alluded to in Scripture.

15. The WEANED CHILD, an advance in consequence beyond the infant which precedes it, whose life, just opening, is surrounded by many hazards.

16. The COCKATRICE, *tjephuon*. This serpent is evidently intended for a proportionate advance in malignity beyond the *peten*, which precedes it; an advance analogous to that of a weaned child beyond a mere infant. We regret the more the want of further description of the *peten*, by Mr. FORSKAL; for what can exceed that venom which produces "instant death?" To assist our enquiries here, we must endeavour to obtain information from the context:—what is this *den* of the cockatrice? The Hebrew word (מַאֲרוֹת, *meauruth*) seems to me not to signify *den*, i. e. "a place enlightened from one hole," as usually understood, from *aur* light; but rather to be plural in its form, and to signify *lightenings*, i. e. brilliancies, sparklings, GLITTERINGS; either flashes of effulgence from the whole, or of glitter from a part, or parts of this serpent. And this is not unlike the acceptation of it by the Chaldee, which understands the eye-ball of this creature; whose radiance, says *Kimchi*, shall be so great as to mislead a child, who shall mistake it for a diamond, or precious stone." SCHEUZER prefers "the socket of the eye-ball," or "the cavern of the eye," because *aar*, in Arabic, signifies a cavern. Against this idea it may be said, that in the former versicle the "hole of the asp" refers to the chink or crevice made by that creature the entrance to his habitation: and such holes were occasionally, at least, in houses and dwellings; for we read of a man's leaning against a wall, and a serpent, *nahash*, biting him, Amos v. 19; and we have a history, in Mr. HARMER, of a serpent shewing his head from a chink in a wall, and thereby occasioning the discovery of a concealed treasure. This leads to the notion of 1. an enlarged—exposed—opening: 2. perhaps, in a place at some distance from a dwelling, to which such a weaned child might ramble, for this *den*.—But,

This representation proceeds wholly on the idea, that the former word (חֹר chur), rendered *hole* of the asp, *peten*, is correctly rendered. That the word in some places means a hole, at which what light enters is a mixture of light and darkness, is agreed; but there are other mixtures of light and darkness, besides that of glimmering light. For instance, this word expresses *paleness* of counte-

nance, Isaiah xxix. 21; paleness is a mixture of white and black, not perfect whiteness. The English word, *hoar*, *hoary*, says PARKHURST, is derived from this root, but *hoary hairs* are not inconsistent with *greyness*. Isaiah uses this word, xix. 9. to denote, says our translation, *net-work*, or *wicker-work*; but possibly this is ill-assorted with "fine flax:" it may be that this word denotes a kind of damasking, or pattern, alternately black and white, like some of our wicker-baskets. The result of these hints is, that the word *chur* may express a *mottled* subject—a mixture in uncertain proportions of black and white. This agrees well with the description of the *bætæn*, as given by Mr. FORSKAL, which he says is *maculatus*, mottled, or spotted black and white; and it seems to me to be not unlikely, that the prophet meant to say "the suckling child should safely amuse himself with considering the mottles of the curious black and white pattern of that deadly serpent the *peten*; and the weaned child should stroke, or pat, or handle, the burnished gold scales of the ferocious *tjepho*, with perfect confidence and security." This sense appears, I say, to be extremely expressive and poetical, is perfectly analogous to the nature of the serpent tribe, of which some species are so innocent, not to say *fondling*, that the ladies carry them in their bosoms, in order to enjoy the coolness of their skins; and the children caress them, as our children do kittens, or puppies. But this is submitted with deference: the naturalist I am sure, will admit it; and I see no reason why the Hebrew philologist should explode it. Vide the thoughts appended to the plates of the *cerastes*, Gen. xvii. 19; and *naja*, Isaiah xi. 14.

CHAPTER XIII. VERSE 21.

1. *WILD* beasts of the desert shall lie there [in Babylon]; their houses shall be full of 2. *doleful* creatures; and 3. *owls* shall dwell there, and 4. *satyrs* shall dance there. And, 5. the wild beasts of the islands shall cry in their desolate houses, and 6. *dragons* in their pleasant palaces.

1. *Wild* beasts of the desert—*tziim*. We had occasion, on Psalm lxxiv. 14. to observe, that probably this word signifies "inhabitants of the wilderness," or rather we would take it here for (bestial) inhabitants of the *dry* wilderness, the desert, agreeably to its root. In this application it will signify, generally, all such kinds of animals—"desert beasts."

But there is greater difficulty in fixing the import of the corresponding word, rendered "*doleful* creatures" (דֹּחִים, *ACHIM*); on which I would observe, that a kindred noun from the same root

(*achu*) imports a *flag*, *sedge*, or *reed*, which grows in the marshes, or in the canals of the Nile, (vide on Job viii. 11.) that is to say a marsh plant; and if we take *achim* here to signify "marsh animals," we shall be, I conclude, not far from its meaning. Therefore, as we have taken *tziim* generally, we must also take this word generally, to render it a counterpart to that; as, on the other hand, if we wish to make this word specific of any particular animal, it will oblige us to do the same with the other. Our public translation is favoured by the lxx. by *Bochart*, and others, who think the yellings of the wild animals are referred to; but, I think, the principle of parallelism forbids our acquiescence in that interpretation.

3. Owls, "*daughters of screams*"—OSTRICHES. Vide on Unclean Land Birds, Lev. xi.; and FRAGMENT, No. CXLIV.

4. Satyrs; *shoarim*, literally, "hairy ones." This word, or at least its kindred, certainly signifies *goats*, which are *hairy* animals; but here it cannot express any domesticated creatures. If it be taken generally, then *shaggy*, rough, hairy, wild beasts, is its meaning; but if it be taken for a certain kind of animal, then I think it possible some of the monkey, or baboon kinds may be intended, especially as they are said to *dance* there, to frisk, to sport, to play their gambols—perhaps, literally (*irked*) to *jerk themselves* forward with violence. "Hairy baboons shall gambol there." I do not know exactly what kinds of baboons inhabit the adjacent countries, and we cannot implicitly trust to the information of those who show wild beasts among us, but some which I have seen under the name of the "Persian savage," were surely *hairy* enough; not to allude to others, as the *simia sphinx*, &c. of Linneus.

5. *Wild beasts of the islands* (AHIM, אִיִּים). This seems to be ill rendered *islands*; it should rather mean *habitations*, or places, or things, settled around a certain spot. In this place, perhaps, wild vermin of cultivated countries (as foxes, weasels, hedge-hogs, &c.) generally taken, including whatever is offensive or destructive to man or to his labours.

But there is another sense in which the word *island* is used in the East, which is not inconsistent with this notion. The *Oases* in the Desert of Lybia, or Egypt, are *islands* of habitable land amid deserts of arid waste. This is the description of them by the Arabs; so that we see how the idea of *islands*, i. e. separations, *insulated* dwelling places may be connected with that of wild beasts. As to islands, i. e. totally surrounded by water, which is our English acceptance of the word, it is I presume, foreign from the import of this passage.

6. *Dragons*, TANIM, vide plate Lam. iv. I

shall only observe, that *tanim* being always placed on *desert* shores, the opposition of the former word, in reference to domestic wild beasts, is maintained by referring this word to desert—sea-side—rocky-shore animals. Such, also, is the fact: Babylon being seated on a river, *land* animals might have access to it; yet marsh or water animals were not excluded, because they might either come from the sea, or they might be such as love fresh water lakes or inundations for their residence. Had Babylon been on the sea, (as Tyre,) or in a sandy desert, (as Palmyra,) or on a rocky mountain (as Jerusalem,) the mixture or consociation of animals so contrary in their manners would have been altogether unnatural.

The whole passage may be understood thus:

There shall the wild beast of the DRY desert lodge:
The savage animals of the (*watry*) marshes shall fully
occupy their houses:
The daughters of screams (ostriches) shall reside there;
And there shall the hairy (baboons) gambol;
The vermin of the plain shall howl in their *now* deserted
edifices;
As the sea-shore *amphibia* shall roar in their *once* voluptuous
palaces.

The reader will judge whether these *oppositions* yet associations, were likely to be adopted by a poet so correct as the prophet Isaiah.

CHAPTER XIV. VERSE 13.

I WILL make it [Babylon] a possession for the BITTERN; and pools of water. Instead of the bittern, or *ardea ibis*, probability, supported by the majority of authorities, leads us to read, the *porcupine*, or *hedge-hog*. Vide the Plate on this passage. Vide also chap. xxxiv. 11. and the Plate.

VERSE 29.

Out of the root of the serpent—nachash, shall come forth a cockatrice—*tjepho*; and his fruit shall be a fiery flying serpent—*sheraph meoneph*.

The reader is referred for what we have said on the *nachash*, or serpent, taken generally, to the dragon of Rev. xii; for the *tjephon*, or cockatrice, to Isaiah xi. Plates. We have added some remarks on the *possibility* of the existence of *winged* serpents of a poisonous nature; and have referred to *winged* lizards not injurious. We shall now endeavour to suggest a hint or two on this *seraph*.

1. It is associated with the *tjepho*, or *naja*, which is of the most venomous kind; this serpent therefore is venomous, yet, perhaps not *immediately* fatal: for we find that the poison of the *naja* requires some time to spread its effect over the person, and to extinguish life; moreover, remedies, taken in time, are salutary.

2. This

2. This *seraph* must be a serpent which inhabits Arabia, or Egypt, or both: Arabia, if that be the country meant by the appellation *South*, chap. xxx. 6. or Egypt, if that be rather the country intended. Moreover, we find these *seraphs* tormented Israel, when in the wilderness of Arabia, Numb. xxi. 6. &c. And in that passage we have a history of the effects of their venom, which, like that of the *naja*, seems not to have produced instantaneous death, but to have allowed *some* time. According to the testimony of travellers, the *cerastes* is the most numerous in those districts; and, indeed, Mr. BRUCE allows no other: nevertheless he himself plainly describes another, differing from the *cerastes*, in having no horn on his head. He describes this serpent as found among the balsam trees; and, I think, if we add "darting from tree to tree," as we find described by NIEBUHR (see the extract from him, *Dragon*, plate), we come pretty near to the idea of these poisonous *flying* serpents, for which we need not quit the country between Judea and Egypt.

All circumstances determine against SCHEUZER, that this serpent resides in the desert, not in stagnant or other waters; and, I rather think, on the whole that the *colour* of this serpent has given name to it, because, to speak of it as occasioning thirst, and burning, by its bite, is to express no more than appertains to many of its tribe, not to one in particular. I venture, therefore, to consider it as having fiery, red, or yellow, for its principal hue, perhaps not without a mixture of brown; which colour is a convenient parallel to the golden *naja*. The word *seraph* certainly signifies *burning*; yet, in the Chaldee, or rather *Talmudical Hebrew*, kindred words signify to *distil*; also *gum*, *resin*, *juice in general*, which is, liquor dropping—distilling from the tree. *Seerephah*, denotes the *catamenia*; and *seriph*, denotes *liquid food*. If this ever had been one meaning of the word *seraph*, in ancient Hebrew, it would decide the question; and would describe a poisonous liquid juice emitted by serpents, which might have the property of occasioning violent burnings, but which might also mean—*venom*, generally taken. I would willingly take this *seraph* for a serpent which ejects its venom, but I cannot find authorities for the existence of such a serpent in Egypt, or Arabia, *at present*, whatever might have existed there *anciently*.

As to the *flying* of these serpents, I must again refer as before; but would add, that I see no decisive necessity for supposing the use of this word to denote *flying with wings*, in all cases; it often signifies *vibration*, swinging backward and forward, a *tremulous motion*, a *fluttering*; and this is precisely what NIEBUHR describes, as produced by the serpents *heie thiäre*, in the branches of the

tree from which they dangle, in order to spring to another. In short, if we connect with this account of NIEBUHR, of the leaping of serpents from the date trees, the venomous properties of those found by Mr. BRUCE, among the balsam trees, which he describes as *hornless cerastes*, I presume, we are not far from the *flying seraphs* of Scripture. Date trees, we know, are extant in the desert where Israel dwelt; and there, too, dwells the *cerastes*: and though it be a contradiction in terms to speak of a *hornless cerastes*, yet it leads us to a conception not inadequate, as I suppose, of the serpent described by Moses, and threatened by the prophet Isaiah.

I do not know whether it is worth while to refer to what *Herodotus* says respecting the *flying serpents*; but his account of their size, as not being large—of their fondness for sweet smells—that they frequent trees which bear spices, and places where the *calamus aromaticus* grows, agrees perfectly with Mr. BRUCE's finding them among the *balsam* trees, and, I think, corroborates the hints we have suggested. Vide *Herodotus*, lib. iii. cap. 107, &c.

** For further information see the various articles annexed to the Plates; in which the subjects of these serpents and others are discussed more at large.—The Cockatrice, Isaiah xi. 14.—Cerastes, Gen. xlix. 17.—Dragon Rev. xii. 3.

CHAPTER XXVII. VERSE 1.

In that day the Lord with his sore and great sword shall punish LEVIATHAN, the piercing serpent, even LEVIATHAN, the crooked serpent, and shall slay the DRAGON that is in the sea.

This is a difficult passage: our translation supposes, that only *two* creatures are mentioned, *leviathan*, and the *dragon*. Others suppose, that three are intended: 1. the *piercing* serpent; 2. the *crooked* serpent; 3. the *dragon*,

We must (on this latter) observe, that the dragon is the *tannin*, an amphibious animal, of which we find a whole class, Lam. iv. plate; but it is here very emphatically mentioned, "~~THE VERY THE~~ *tannin*." One would wish, therefore, to refer it to the largest of the kind.

The second animal is, the *crooked nachash*; rather the tortuous, winding, folding, writhing, twining, serpent; not a serpent naturally *crooked*, but one whose manners and progresses are from side to side, gliding in, as it were, *meanders*, bending all ways to effect its course. I incline to seek this serpent, either among those water-snakes which are referred to on Rev. xii. plate, respecting which

which we desire information, but have thought they might grow at least to the size of land serpents; or else, to those land serpents of enormous magnitude, which take the water with great readiness, and swim to considerable distances out at sea. If we had satisfactory accounts of the true *hydras*, I should probably prefer them; but, as the *tanin* are *amphibious*, we are not bound to seek other than *amphibia* for this second creature.

The first animal mentioned in this passage I incline to think is the *crocodile* itself, whose *stiff* defences do not permit his ready turning, but oblige him to take a circuit for that purpose. I would, therefore consider the word *leviathan* as signifying the jointed, riveted, elongated reptile, the *crocodile*; whose rigidity makes him go as *straight* as possible; contrasted with a *bending* reptile, scaly also, indeed of very hard scales, strongly jointed, riveted, as it were, and of great length; and further contrasted by a sea-animal, capable of diving, and holding out on the mighty waters a longer course, perhaps, than either of them: yet not wholly a sea-resident, but *amphibious*. The passage implies so much, as usually understood. N. B. The word *earth* in our translation does not always mean the whole globe, but should be (often) rendered *land* or *region*; and the word *sea* should (often) be *waters*; it is sometimes taken for the Nile. If it be so taken here, then the *crocodile* is undoubtedly meant by the first *leviathan*; and we must find the following creatures among its neighbours. I do not recollect any serpent, expressly of Egypt, which answers to this requisition; but we know, that adjoining to Egypt, in Libya, and Africa at large, is the very residence of immense serpents; witness that of *Regulus*, to which we again refer. As to the *tannim*, we know that *phocæ* or seals, are found in the Mediterranean, on one side of Egypt, and in the Red Sea, on the other side; and these (latter) *may* be the kind referred to.

But I would not omit to mention the sentiment of SCHEUZER, that the first *leviathan*, the *straight*, should be rendered *bar*; for so the word implies, a *bar* for a door, for instance; as if this creature had a *bar* across it, rather than along it. He prefers the *zygena*, or hammer-headed shark; taking the projecting sides of the head for the *bar* intended; and, in favour of this, we ought to add, that Mr. BRUCE mentions a large fish of this kind, [twelve feet long] struck from his vessel in the Red Sea. Travels, Vol. I. But against this may be objected a doubt, whether the word *leviathan* ever means a true fish, a creature which resides wholly in the waters: it seems rather to mean an *amphibious* reptile; and *nachash*, as we have seen, may be taken in the same sense, which is perfectly

agreeable to the scope of this passage. The Jews, however, are not satisfied with the productions of nature; but on this subject have recourse to a fish, in length 500 *stadia*; and in *Bava Bathra*, they mention a ship which spent three days on the back of this fish, in sailing from one fin to another.—This is no subject, not even metaphorically taken, to *amuse*, much less to edify, a maritime nation. Can they mean the Sea-serpent?—or the Kraken of Pontoppidan?

CHAP. XXVIII. VERSE 25.

WHEN the ploughman hath made plain the face of his ground, doth he not cast abroad, 1. the FITCHES, scatter, 2. the CUMMIN, and cast in, 3. the principal WHEAT, and, 4. the appointed BARLEY, and, 5. RYE in their places?

1. FITCHES, or *vetches*, a kind of tare. This word occurs but this once in Scripture, so that we have only the assistance of versions, not of any parallel places. *Jerom* renders it by *Gith*, of which *Pliny* speaks, lib. xx. cap. 17. "Some among the Greeks name the *gith melanthion*, others *melaspermon*, [black-seed]. The best is of the strongest smell and blackest colour."

Ausonius says, it is "pungent as pepper." *Pliny* adds, "Its seed is very good for seasoning food: and lib. xix. cap. 8. "It seems to be grown purposely for the bake-house;" that is to say, to be sprinkled on bread, as we do caraway seeds, &c. on biscuits. Commentators are mostly in favour of this plant, the *gith*:—but what is this *gith*? Mr. PARKHURST thinks it is the *fennel*; and he quotes *Ballester*, as saying, (*Hier.* lib. iii. cap. 5.) "*Gith* is commonly met with in gardens; it grows a cubit in height, sometimes more. The leaves are small, like those of *fennel*, the flower blue, which disappearing, the ovary shews itself on the top, like those of a poppy, furnished with little horns, oblong, divided by membranes into several partitions and cells, in which are inclosed seeds of a very black colour, not unlike those of a leek, but very fragrant."

I doubt, however, whether the writer who compares the leaves of this plant to those of *fennel* is not decisive against Mr. PARKHURST'S notion; for then, why not say at once it is the *fennel*? Yet, that it classes with the *fennel* may be admitted. Is it the *dill*?—is it the *anise*?—or, is it the *caraway*?—the latter has in favour of it our custom of strewing it on cakes; and perhaps the *anise* has in favour of it its being associated with the *cummin* in Matthew xxiii. 23. This is so much the stronger, if the present passage be understood of a *similarity* not of a *contrast*.

2. CUMMIN,

2. CUMMIN, signifies, without contradiction, the plant known by us under that name; and which is in general use throughout Europe. The *long-seeded cummin*, Matth. xxiii. 23.

3. WHEAT, vide on Exod. ix. 32. The prophet adds, says our translation, the *principal wheat*:—*regulated wheat, measured wheat*, say most interpreters. I rather think, *protected wheat*; wheat so much valued, as to be very carefully attended to. The root of the word seems to me to imply *protection*, and so, a *chief*, i. e. a *protector*; but not so much, perhaps, a protector, in the instance of wheat, as an article under especial protection, by reason of its importance. Can it mean *lordly wheat*? a *dignitary* among vegetables.

4. BARLEY, vide on Exod. ix. 32. This barley also has an epithet applied to it: the *appointed barley*: I confess, I know no *natural* appointment of barley, more than of other grain. I have been told by one of our best antiquaries that barley was certainly the first corn cultivated for human food; and it appears on many of the medals of Sicily, unless that plant so represented be a *bearded wheat*. If the sense of barley *designed* for food be not accepted here, I know no better, than to take this epithet as a reference to the *beard* of barley; a kindred word appears to mean in Talmudical Hebrew, a sharp-leaved herb. Can this *appointed barley* be a kind of *lieutenant* to *principal wheat*?

5. RYE, *cusmet*, vide on Exod. ix. 32.

As to the manners of threshing out corn, and wherein they differ, vide FRAGMENT, No. xxviii.

CHAP. XXIX. VERSE 3.

IT shall be as when a hungry man dreameth, and behold he eateth; but he awaketh, and his soul is empty; or as when a thirsty man dreameth, and behold he drinketh; but he awaketh, and behold he is faint, and his soul hath appetite.

The poetry of this simile is obvious to every reader of sensibility; but we have had repeated occasion to observe that we, in this country, cannot enter into the feelings of those who reside where water is scarce. As the simile of the prophet is drawn from nature, the reader will not be displeased with an extract which describes the actual occurrence of such a circumstance.

“The scarcity of water was greater here at *Bubaker*, than at *Benown*. Day and night the wells were crowded with cattle lowing, and fighting with each other, to come at the trough: excessive thirst made many of them furious; others, being too weak to contend for the water, endea-

voured to quench their thirst, by devouring the black mud from the gutters near the wells; which they did with great avidity, though it was commonly fatal to them.

“This great scarcity of water was felt by all the people of the camp; and by none more than myself.

“I begged water from the negro slaves that attended the camp, but with very indifferent success; for though I let no opportunity slip, and was very urgent in my solicitations, both to the moors and to the negroes, I was but ill supplied, and frequently passed the night in the situation of *Tantalus*. No sooner had I shut my eyes, than *fancy would convey me to the streams and rivers of my native land; there as I wandered along the verdant brink, I surveyed the clear stream with transport, and hastened to swallow the delightful draught; but alas! DISAPPOINTMENT AWAKENED ME, and I found myself a lonely captive, perishing of thirst amidst the wilds of Africa!*

“One night, though the trough was none of the largest, and three cows were already drinking in it, I resolved to come in for my share; and kneeling down, thrust my head between two of the cows, and drank. MUNGO PARK’S *Travels in Africa*, p. 145.

CHAPTER XXX. VERSE 6.

THE young lion—*labia*, vide on Gen. xlix.

The old lion—*laish*, vide *ib.*

The viper, *aphoeh*, vide Job xx. 14.

The fiery flying serpent, vide on chap. xiv. 29.

VERSE 20.

Blessed are ye who sow beside all waters; who send forth thither the feet of the ox and the ass.

It seems wonderful that *rice*, which is now so indispensable a grain in Asia, Egypt, &c. should not be mentioned in Scripture. I have thought that this passage alludes to the necessary preparation for sowing it; and therefore have extracted the manner of its cultivation from SWINBURNE’S *Travels in Spain*, Letter xvii.

“In the afternoon, at the entrance of a more mountainous country, we came to the *rice-grounds*, now in stubble. The process of that tillage is as follows:—In winter they plow out a piece of land, and sow it with beans, that come into blossom about March, when they plow them in for manure; water is then let in upon the ground, about four inches deep. It next undergoes a third ploughing, after which the rice is sown. In fifteen days it comes up about five inches out of the earth, and is pulled up, tyed in bundles about a foot diameter, and carried to another well prepared field

field, covered with water to the depth of four inches. Here each planter sets the plants of his bundle in the mud, in rows of about a foot distance one from another. Every stem ought to produce from ten to twenty-four fold, and grow so close that the ears may touch. When ripe, it is gathered in sheaves, and put into a water-mill, where the lower grinding-stone is covered with cork, by which means the chaff is separated from the grain, without bruising. The rice of Valencia is yellower than that of the Levant, but much wholesomer, and will keep longer without growing musty."

CHAPTER XXXIII. VERSE 4.

YOUR spoil shall be as the gathering of the CATERPILLAR—as the running to and fro of LOCUSTS, shall he run upon them.

CATERPILLAR, *chasil*. This is not the locust, being distinguished from it, Joel i. 4. Michaelis inclines to the *chafer*. Vide Joel, and Locust, plate.

CHAPTER XXXIV. VERSES 11, &c.

THE, 1. CORMORANT and, 2. the BITTERN shall possess it; 3. the OWL and, 4. the RAVEN shall dwell in it;—5. THORNS shall come up in her palaces; 6. NETTLES and, 7. BRAMBLES in the fortresses thereof: and it shall be an habitation for, 8. DRAGONS, and a court for, 9. OWLS. The, 10. WILD BEASTS of the desert shall also meet with the, 11. WILD BEASTS of the island; the, 12. SATYR shall cry to his fellow, 13. the SCREECH-OWL shall rest there—there shall, 14. the GREAT OWL make her nest;—and, 15. the VULTURES be gathered.

1. CORMORANT. *Kaat*, the pelican. Vide Unclean Water Birds, Lev. xi.

2. The BITTERN. It must be owned the company in which this second creature, the *kephud*, is placed, leads strongly to the notion of its being a bird: but see the plate of the Porcupine, on Isaiah xiv.

3. The OWL. *Jansuph*, the *ardea ibis*. This we have rather supposed might be the *bittern*. Vide on Lev. xi. It is remarkable that the Arabic version reads *al houbara*. According to Dr. SHAW, the *houbara* "is of the bigness of a capon, but of a longer habit of body. It feeds on little shrubs and insects, like the *graab el Sahara*, frequenting in like manner the confines of the desert." *Goli*us interprets it the *bustard*, which answereth indeed in colour, habit of body, and number of toes, but is twice as big. It is clear that these birds

differ only as large and small. Dr. RUSSE L says the Arabic name of the bustard is *houbry*.

The *cormorant*, No. 1, and the *bittern*, No. 2, (if a bird,) are *water-birds*—this No. and the next are *land-birds*; but wild, not domesticated.

4. The RAVEN, *oreb*, vide on Lev. xi.

5. THORNS, *sirim*, vide on Psalm lviii.

6. NETTLES, *kemush*; Vulgate, *urtica*. We have dismissed the *nettles* from Job. xxx. 7. by substituting taller vegetables; but in the present instance we have no need to adopt that principle. We therefore admit them here, as we perceive no impropriety resulting from their admission.

7. BRAMBLES, *cuach*, vide on 2 Kings, xix. 9.

8. DRAGONS, *tannim*, vide on Lam. iv. plate.

9. OWLS, *daughters of screams*, ostriches, vide Lev. xi.

10. WILD BEASTS of the desert, *tjim*, vide on chap. xiii. 22.

11. WILD BEASTS of the island, *aïm*, vide chap. xiii. 22.

12. SATYR. Vide *ib*.

13. The SCREECH-OWL, *lilith*. This word is a source of much confusion among interpreters. The root certainly signifies *night*, and a night creature we must, in all probability, seek to answer it; but is it a beast or a bird? The prophet has mentioned several birds, in the first place; then he has mentioned several beasts; does he here return again to birds? If we had already accepted *two* owls, making this a *third*, as our translators have done, much might be said against thinking it to be an owl here; but, as no other word used seems to denote an owl, this bids fairest to be its import. Nevertheless, we have taken, on Lev. xi. 16. a very different word to signify an owl, perhaps even the *screech-owl*; and it must be owned that an owl would be better placed before, among *ravens*, than here, after satyrs.

14. The great OWL, *kippuz*. This word also occurs only in this place, so that we have no assistance, except very little from the versions. Owl, it certainly is not. Some have taken it for *kippud*, the *porcupine*, but the difference between the words *kippud* and *kippuz* is apparently too great to permit this: not to insist that we had *kippud* in verse 11. *Bochart*, dissatisfied with all opinions, seeks this creature in the serpent-tribe, thinking it to be the *acontias*, or dart-serpent. A word nearly resembling this, *kipphaga*, in Arabic, signifies *to leap*: and such is the action of this serpent. The prophet's hints respecting making a nest, and laying and hatching eggs, are nevertheless, I think, a negative to this notion: for though some serpents are *oviparous*

oviparous, and may be thought to make nests to receive their eggs, (which yet requires proof,) I know no serpent that *hatches* them, warms them by incubation, and forwards them by parental attention. These actions are certainly those of a bird.

This creature, then, the *kippuz*, will not assist us to determine the foregoing, which, apparently, is allied to it in nature. It might be doubted whether the *lilith*, following the beasts, might not itself be a beast:—in which case, perhaps, the black wolf, or rather nightly prowling beast, might have been intended. But if *lilith* introduce a distinct class of birds, then it must, most probably, be a *night* bird, and those which follow it night birds too. So far as appears, different kinds of owls might be called by the names *lilith* and *kippuz*; and the following creature, 15. *daiuth*, which we have (vide Lev. xi.) thought to be a bird, may be a *night* bird, hawk, also. If, then, these latter creatures may be so far of the same kind as to be all of them *night* birds, we cannot wonder that travellers give no information about them. Perhaps *lilith* and *kippuz* may be so named from their cries; their voices being imitated in their names.

CHAPTER XXXVIII. VERSE 14.

AS a CRANE or a SWALLOW, did I chatter.

The CRANE, *sus*. Bochart inclines to consider this word as denoting the *swallow*, and the second word as denoting the *crane*. He has on his side the lxx, *Symmachus* and *Vulgate*: but against him many more versions and commentators, who, with our own, read *crane*. The root signifies *swift*, and we call one of the swallow tribe by this name. Probably, it should be read rather *sis* than *sus*, for which we have some MSS. But, have we not another word for the *swallow*? Jonathan seems to hint at a bird resembling the crane, yet not the crane itself; a water bird, with a long neck. The Arabic inclines to the swallow.

2. SWALLOW, *ogur*. Bochart thinks this should be the *crane*.

I suppose the crane, like the stork, has a facility of moving its bill, so as to rattle and chatter. Travellers in Asia have noticed this as a frequent action of this bird; and that when one has begun, the clattering of bills is repeated by all within hearing. The action of the bird, then, coincides with the meaning of the writer, and it may be that we should rather look for birds more alike in nature than the *crane* and *swallow*. Perhaps we should not go out of the crane tribe to seek them, especially as this tribe furnishes many beside the stork,

which resemble the *crane* in figure and in general manners.

CHAPTER XLI. VERSES 17, &c.

I WILL plant in the wilderness, 1. the CEDAR, 2. the SHITTAH-tree, 3. the MYRTLE-tree, 4. the OIL-tree: I will set in the desert, 5. the FIR-tree, 6. the PINE, and, 7. the BOX-tree together.

1. The CEDAR, *aretz*.

2. The SHITTAH, vide Exod. xxv. 5.

3. The MYRTLE, *hadas*, vide on Nehem. viii.

4. The OLIVE, or oil-wood.

5. The FIR-TREE, *berush*.

6. The PINE, *tidaher*; a tree so called from the *springiness* or *elasticity* of its wood, says PARKHURST. This would lead us to the *yew*, whose use in the making of bows should not be forgot by Englishmen. But no interpreter, that I recollect, has thought of this tree. One of the kinds of oak, which is most famous for bearing the galls produced by means of the puncture of insects, has authorities in its favour. Luther thought it was the *elm*, which is a lofty and spreading tree. The fir, having been mentioned, we should not expect another of the same kind, which opposes the *sapinus* of the lxx. and in some degree our *pine*.

I would observe further, that we should be cautious of choosing trees for this situation in the wilderness, which inhabit very far north. It is probably a tree which grows on Mount Lebanon. Vide chap. lxi. 13.

7. The BOX-tree, *tashur*; so called from its *flourishing*, or perpetual viridity—an *evergreen*. This might lead us to look for evergreens among the foregoing trees; and perhaps by tracing this idea we might attain to something like satisfaction respecting them, which at present we cannot. A plantation of evergreens in the wilderness is not unlikely to be the import of this passage. The contrast between a perpetual verdure, and sometimes universal brownness, not enlivened by variety of tints, must be very great: nevertheless, we must take care not to group *unnaturally* associated vegetation.

CHAPTER L. VERSE 6.

I GAVE my back to the smiters, and my cheek to them that plucked off the hair. I hid not my face from shame and spitting. Observations of actual occurrences, made on the spot, are certainly most effective and confident illustrations. Mr. HANWAY having expressly recorded his remarks

marks on a scene differing little, if at all, from that alluded to by the prophet, the reader will doubtless be pleased to peruse an extract from his description.

"A prisoner was brought, who had two large logs of wood fitted to the small of his leg, and riveted together; there was also a heavy triangular collar of wood about his neck. The general asked me if that man had taken my goods? I told him, I did not remember to have seen him before. He was questioned some time, and at length ordered to be beaten with sticks, which was performed by two soldiers, with such severity, as if they meant to kill him. The soldiers were then ordered to spit in his face, an indignity of great antiquity in the East. This, and the cutting off of beards, which I shall have occasion to mention, brought to my mind the sufferings recorded in the prophetic history of our Saviour: "He gave his back to the smiters, and his cheeks to them that plucked off his hair: he hid not his face from shame and spitting." HANWAY, vol. i. p. 203.

"Sadoc Aga, sent prisoner to Astrabad—his beard was cut off; his face was rubbed with dirt, and his eyes cut out: upon his speaking in pathetic terms, with that emotion natural to a daring spirit, the general ordered him to be struck across the mouth to silence him; which was done with such violence, that the blood issued forth." p. 204.

This extract not only illustrates the treatment of Jesus Christ, who was struck on the mouth, in punishment, and to silence him, but that of the soldiers who were about to examine, by beating, the apostle Paul, and who only desisted on his claiming the exemption belonging to a Roman citizen. Acts xxii. 25.

It also explains and justifies the law that forbade striking a prisoner to which the Apostle Paul alluded, Acts xxiii. 3. when the High Priest commanded that he should be stricken on the mouth; no doubt, intending to "silence him;"—and perhaps, this was done with "such violence, that the blood issued forth." The propriety of forbearing from such cruelty, is too evident to need illustration.

CHAPTER LI. VERSE 20.

AS a WILD BULL in a net. *Tau*, or *thau*. See on Deut. xiv. 5.

We know that the Hebrew word *bekar* signifies the beeve kind; the Arabic has also *bukre*, as the generic name, and *thaur*, which is applied only to the bull: this is certainly a resemblance of the Hebrew *tau* or *thau*, (also to the Latin *taurus*;) might not the Hebrews have a similar duplication of name? If this may be, then the figure of this wild bull may possibly be seen with that of the rhinoceros, plate, Job xxxix. But some have supposed the buffalo to be the *thau* of this place. Are these, when wild, caught in nets? The buffalo is certainly allied to the beeve kind, if not indeed a species of it. Bochart thinks it is of Persian origin, and not known in Judea so early as this prophet.

CHAPTER LX. VERSES 6, 7.

A MULTITUDE of CAMELS and DROMEDARIES.

1. CAMEL, *gimel*.

2. DROMEDARIES, *bichri*; a species of camel, of a slighter make, and of speed superior to others. For its figure, vide plate of Unclean Animals. For its speed, vide Fragment, No. cxxii.

"The dromedary, from all that I was able to learn, is only a high breed of the Arabian camel. It is of lighter make, more cleanly limbed, its bunch smaller, and, on the whole, a less ugly animal. Instead of the solemn walk of the others, it ambles with more agility, and is capable, as it is said, of going as far in one day as the ordinary camels usually go in three or four." RUSSELL'S *Aleppo*, vol. ii. p. 169.

The camel with two bunches is of the Persian breed. *ib*.

AN
EXPOSITORY INDEX

TO THE BOOK OF THE PROPHET

JEREMIAH,

ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER II. VERSE 22.

THOUGH thou wastest thyself with NITRE and much SOAP—

1. NITRE, not the common nitre, but the salt, *natron*; for which vide Prov. xxv. 20.

2. SOAP, or fuller's soap, is named in Hebrew, *berith* or *borith*, signifying the *cleanser*. It is by some supposed to be a *salt*, extracted from the earth, in India, &c. called by the Arabs *bora*: this name resembles *borax*, which is a salt used as a solder to metals. But others prefer a vegetable; the Lxx. render *ποια*, or *ποα*, a *herb*. The ancients certainly employed vegetables, and the salt extracted from them, for the purpose of washing linen. *Dioscorides* and *Pliny* mention the *struthion* as so employed. The Persians use this plant as soap. But others are for the *kali* or *soda*, which, in Syria, is used as soap. The Turks use this plant, or its ashes, to cleanse garments; and it imparts to them a great degree of softness.

The *kali*, *soda*, *salsola kali*, or *barilla*, is called in the London Pharmacopœia, *natron*; and there seems to be sufficient reason to consider it as the *borith*-plant of Jeremiah: at least it is the best known to us of those plants which possess the property of cleansing, either by themselves or their salts. In its wild state it rises about a foot in height; the leaves are long, narrow, and prickly, the flowers whitish or rose-colour. It affects the sea-shore, and indeed is considered as a sea-weed. The best, burned into an hard mass of salt, comes from Alicant in Spain. Combined with fat, it forms soap, the cleansing virtues of which are well known in every family.

VERSE 23.

A swift DROMEDARY traversing her way. Vide on Isaiah lxvi. 20.

A WILD ASS used to the wilderness, parah. Vide on the Wild Ass, plate, Job xxxix.

CHAPTER V. VERSE 6.

A LION out of the forest shall slay them: a WOLF of the evenings shall spoil them: a LEOPARD shall watch over their cities.

1. A LION, *ariah*, vide Gen. xlix.

2. A WOLF, *zahab*, vide *ib*. The prophet seems to distinguish a species of wolf here which deserves our notice, (*orebuth*,) either a wolf of the evening glooms, darknesses; or, a wolf of the desert glooms, darknesses, caverns; either of these agree with the wolf: but may not the latter be preferable in respect to parallelism? 1. A lion from the forest; 2. A wolf from the desert. The Greek interpreters translate *oreb*, Arabia, from the Arabian deserts. Vide what is said on the *sheeb*, (which name, by the bye, is not very distant from *zahab*,) or maddening wolf of the desert, plate of Hyæna, Jer. ii. 9.

3. A LEOPARD, *nimmer*, vide on Isaiah xi. 6.

CHAPTER VIII. VERSE 7.

Even, 1. the STORK in the heavens knoweth her appointed times, and, 2. the TURTLE, and, 3. the CRANE, and, 4. the SWALLOW observe the time of their coming.

Few subjects in natural history are more interesting than the periodical removals and returns of creatures,

creatures, and among them of birds. Animals migrate, to what degree they are able; fishes migrate, through great extent of sea; but birds, by reason of their powers of flight, and the liberty they enjoy in their actions, traverse countries and distances, to which other creatures are incompetent. We cannot here enlarge on the migration of birds; but must content ourselves with determining to what birds the prophet alludes.

1. The STORK, *chasidah*, vide on Lev. xi. and plate of Unclean Birds.

2. The TURTLE, *tur*. There is no difficulty understood to occur on this word. The spouse in the Canticles is called by this name. That this bird visits the garden when spring appears, is evident, from its being one of the marks of that season: "the voice of the turtle is heard in our land." Cant. ii. 12.

3. The CRANE, *sus*, vide on Isaiah xxxviii. 14.

4. The SWALLOW, *ogur*, vide *ib*.

It is certain, by this passage, that the two latter birds are migratory; so that if we should change them for each other, as *Bochart* proposes, we should nothing vary the sense of this passage.

I think, however, we want information whether the *turtle* be a migrating bird. Among ourselves, I do not know that the wood-pigeon migrates, and do not perceive any reason why the turtle should quit its residence in the much milder regions of the East. Perhaps this word, as here used, includes a whole *genus*, of which some may migrate. An English writer would certainly have mentioned the *cuckoo* among migrating birds, not the least remarkable. The following information determines the time of the cranes. Do the turtles follow them?

"The Turkish governor of Athens is called the *Vaiwode*. He is either changed or renewed in his office every year, the beginning of March. The Athenians say he brings the *cranes* with him; for these birds likewise make their first appearance here about that time: they breed; and when their young have acquired sufficient strength, which is some time in August, they all fly away together, and are seen no more till the March following. STUART, *Antiq. Athens*. vol. i. p. 10.

Hasselquist tells us, "The Arabs call the common pigeon, *haram*; the turtle, *jamara*; and the stock-dove, *josie*. The last is a bird of passage. It makes its abode in the holes of the houses around Cairo, from the time that the water is admitted into the canal of Trajan, till the time when that canal is quite dry; and it is seen no more during the remainder of the year." Fr. Edit. p. 30. If this be correct, then the Hebrew *tur* is not the *turtle*, (or at least not the turtle only,) but the *stock-dove*.

VERSE 17.

SERPENTS, *cockatrices*, which will not be charmed. Vide on the *Naja*, plate, Isaiah xi.

VERSE 22.

Is there no BALM IN GILEAD? no physician there? Why then is not the health of the daughter of my people recovered?

According to Mr. BRUCE, the *balessan*, *balsam*, or *balm* grows to the height of fourteen feet; its branches are numerous, spreading, crooked; the wood white, soft; the bark ash-coloured. The leaves are small, few; the flowers white, scattered on the branches. It is a native of Abyssinia, growing behind Azzab, along the coast to the straits of Babelmandel; and, says Mr. BRUCE, it was transported into Judea a thousand years before the queen of Sheba made presents of this tree to Solomon, as *Josephus* relates. Many of the ancient physicians supposed this tree to be the production of Judea only; and hence they named it *Balsam Judaicum*, or balm of Gilead. Professor *Forskæl* discovered this tree to belong to the genus *amyris*. He found his specimen in Arabia.

This balsam issues spontaneously from the bark of the tree; but is more commonly obtained by incisions. The *Xylobalsamum*, as its name imports, is prepared from the wood, and the *Carpobalsamum*, from the fruit. "The bark," Mr. BRUCE says, "is cut by an axe, when the juice is in its strongest circulation, in July, August, and September. It is then received into a small earthen bottle, and every day's produce is gathered, and poured into a larger bottle, which is kept closely corked. The *opobalsamum*, or juice flowing from the balsam tree, at first when it is received into the bottle or vase, from the wound whence it issues, is of a light yellow colour, apparently turbid, in which there is a whitish cast, which, I apprehend, are the globules of air that pervade the whole of it in its first state of fermentation; it then appears very light on shaking it. As it settles and cools, it turns clear, and loses the milkiness which it had when first falling from the tree. It has then the colour of honey, and appears more fixed and heavy than at first. After being kept for years, it grows of a much deeper yellow, and of the colour of gold. The smell at first is violent, and strongly pungent, giving a sensation to the brain like that of volatile salts, when rashly inhaled by an incautious person. This lasts in proportion to its freshness; for being neglected, it loses this quality, as it probably also does by extreme old age." BRUCE, vol. v. p. 16.

The quantity procurable from one tree is very small, three or four drops from some trees, from others sixty drops; and these are the most fertile. The collecting it is consequently tedious and troublesome,

blesome; and it is very rarely to be met with in purity. Lady Wortley Montague could procure but little, and that with difficulty, at Constantinople; and the experiment made by that lady on the skin of her face is not what, perhaps, many English ladies would wish to repeat. It had the effect of taking off the skin; and though the Turkish ladies said the succeeding was finer than the former, yet her ladyship was hardly persuaded into that opinion: nor does she seem to have been over-delighted with the trouble it gave her, or the pleasure of the experiment. We must, however, make allowances for her ignorance of the best manner of using it; as that may be a sovereign balsam under good management, and for some disorders, which is injurious when improperly applied, or ill directed.

The antiquity of the commerce in this balsam, and consequently of its reputation, appears, Gen. xxxvii. 25; and the high opinion entertained of its salutary virtues, is evident in the passage before us. In Turkey it is in great esteem as a medicine, and no less as an odoriferous perfume, (unguent) and cosmetic. Its reputation among ourselves is not superior to that of other balsams, as that of Canada, or that of Copaiba; but this may be partly owing to the adulteration it has undergone, and partly to keeping, or the effects of the voyage, &c.: this at least seems to be counterbalanced by the virtues and uses attributed to it by eastern nations, to enumerate which would be outraging the bounds of all rational credibility.

CHAPTER XIV. VERSES 6, 7.

YEA, the *Hind*, female Stag; *ailuth*, also calved in the field, and forsook her calf, because there was no green grass—*desha*. And the wild Asses—*paraim*, did stand in the high places; they snuffed up the wind like Dragons—*tanim*.

1. The *HIND*, *ailuth*. Vide on Gen. xlix. Naphthali, plate.

2. *WILD ASSES*, *paraim*. Vide on Job xxxix. plate.

3. *DRAGONS*, *tanim*. Vide on Lam. iv. plate.

CHAPTER XVII. VERSE 6.

HE shall be like the heath in the desert; he shall not see when good cometh; but shall inhabit the parched places in the wilderness, a salt land.

What plant is this *heath*? Heb. *oror*, *auraur*, or *gnoror*;—the *Tamarisk*, say some, as lxx. and Vulgate; others, “a leafless tree;” and PARK-HURST quotes from Taylor, “a blasted tree,

stripped of its foliage.” “If it be a particular plant, the *Tamarisk* is as likely as any; . . . the branches of these trees are produced in so straggling a manner, as not by any art to be trained up regularly, and their leaves are commonly thin on their branches, and fall away in winter.” But, the question returns, can the *Tamarisk* live in a salt land? in parched places? I would rather, therefore, seek this *oror* among the *lichens*, a species of plants which are the last productions of vegetation, under the severe cold of the frozen zone, under the glowing heats of equatorial deserts: so that it seems best qualified to endure parched places, and a salt land. *Hasselquist* mentions several kinds seen by him in Egypt, Arabia, and Syria.

I would also allude to what the Arabians say of their plant *murar*; which *may*, perhaps, be applicable to the Hebrew *oror*, to whose name also it bears some resemblance. It is of a sharp taste, (astringent,) and when brouzed by camels, contracts their gums around their teeth, and renders them bare, and causes the lips of those animals which have eaten of it, to adhere together. It grows to the height of a shrub. *Michaelis*, Q. xlii.

CHAPTER XLVIII. VERSE 6.

FLEE, save your lives, and be like the *HEATH* in the wilderness.

The word for *heath* is here spelled fully, as it should seem, *oruor*; which interpreters have usually rendered as they have done *oror* in chap. xvii. 6. But the lxx. read *orud* [עֲרוּר עֲרוּר, *orud*, or *oror*]; “You shall be like the *WILD ASS* in the wilderness.” This seems to agree with the flight recommended before; otherwise, we must refer to the *despoiled*, or to the solitary nature of the *oror*, as already hinted on the former passage. [May *orud* be the subject intended in that place, also? If so, the inhabiting a salt land, is perfectly natural. Vide *Wild Ass*, plate.]

CHAPTER LI. VERSES 14. 27.

I Will fill thee with men as with *CATERPILLARS*, *ialek*:—verse 27. Cause the horses to come up as the *ROUGH CATERPILLARS*, *ialek*.

Vide Psalm cv. 27. where we have thought this insect might be the *chafer*, if not the *rough caterpillar*: SCHEUZER adds, “We shall not be far from the truth, perhaps, if with the ancient interpreters of Scripture, we understand this *ialek* of a kind of locust. Several kinds of locusts have hair, principally on the head, and some are found which have prickly points standing out. Perhaps there

there is an allusion to such a kind in Rev. ix. 8. where we read of locusts "having hair like the hair of a woman." The Arabs call this kind of locust *orphau*, *al-phanthapho*.

VERSES 34, 37.

Nebuchadnezzar hath swallowed me, as a Dragon—TANIN, swallows water, or inhales air, when swimming. *Babylon shall become a dwelling-place for Dragons—tanim*. Vide on Lam. iv. plate.

CHAPTER LII.

THE transportation of captives in great multitudes, the confusion, and the manners of eastern conquerors, and victorious armies, are well described in the following extract; we need not doubt that the transportation of the Jewish captives was much like that of other nations in the same melancholy circumstances.

"M. Fornetti and I resolved to go over to

Krim Guerai, who had obliged the Porte to nominate him in his place. We found the new *Khan* at *Kichela*, with a part of his troops, loaded with the spoils of Moldavia, which he had laid waste. It is scarcely possible to form any idea of pillage so sudden and rapid; and it is difficult to conceive how an army of eighty thousand men could, in seven days, over-run a great province, and carry off forty thousand slaves, and all the flocks, herds, and tents, in which they were kept, besides an enormous quantity of other plunder. We saw the plain of *Kichela* covered, as far as the eye could reach, with male and female slaves of every age; oxen, camels, horses, sheep; and utensils of every kind, piled up at different distances. *Baron du Tott's Travels*, p. 15.

We may believe, also, that the army of *Nebuchadnezzar* had its plunder, beside that carried off by the king himself; for usually the suffering party sustains more injury from the marauders which accompany a camp, than from any regular requisition commanded by the general.

THE LAMENTATIONS OF JEREMIAH.

THE LAMENTATIONS OF JEREMIAH, which form an APPENDIX to the book of that prophet, do not afford any thing new in natural

knowledge; or different from what has been already treated on elsewhere.

AN

EXPOSITORY INDEX

TO THE BOOK OF THE PROPHET

EZEKIEL,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER I. VERSE 4.

—AS the colour of AMBER, out of the midst of the fire.

The original word for amber is *chasmal*, which the lxx. have rendered *electron*; not meaning amber, the natural production of certain countries, a bitumen found in the earth; but an artificial composition, probably of brass (copper) and gold. Vide on *Ezra* viii. 27. where we have hinted at this mixed metal. Among other reasons for

thinking natural *amber* could not be intended here, is the remark, that in the midst of a fire that substance would soon lose its transparency, and instead of glowing would become opaque: neither could *chrysal* be the substance meant, as that would gather soot; nevertheless, both these articles were called by the name *electrum* among the ancients. The Arabic version varies, reading in verse 4. *al-karabe*, amber; in verse 27. *maha*, chrysal. SCHEUZER is determinate for the mixed metal, as *Bochart* was before him. There are several

several kinds and degrees of it; but these we have no need to enumerate, as we cannot ascertain what kind the prophet intended.

CHAPTER II. VERSE 6.

SON of man, be not afraid though 1. BRIARS, and, 2. THORNS be with thee, and thou dost dwell among 3. SCORPIONS.

We have here two words which I suspect have been misunderstood: the first is *serebim*, (סרבים) PARKHURST inclines to render it *nettles*, a plant which causes by its prickles a sensation of *burning*; as if this word, which occurs no where else, was related to (סרב, *tjerb*,) to *scorch*. Perhaps this word may rather indicate somewhat referable to *prickles*.

The second word is *selunim*, (סלונים,) which PARKHURST supposes to be a kind of *thorn*, over-spreading a large surface of ground, as the *dew-briar*; and it must be owned that this word is used chap. xxviii. 24. in connection with *kutj*, which in Gen. iii. 18. is rendered *thorns*; and this is the strongest argument against what I am about to propose. We have already seen that the thorny plants, from their numbers, elude our appropriation: but whether this place may be taken as decisive, is not, perhaps, easily determined. The actions attributed to these *thorns* in chap. xxviii. 20. seem hardly coincident with those to which vegetables are competent: since they seem to have *despised*, perhaps *insulted* Israel, as the words following express.

But what connection have these words with the third, *okrabim*, which clearly signifies *scorpions*, and which forms a climax to the former? We should also remark the awkwardness of the phrase, "*briars and thorns are with thee.*" Did the prophet then cultivate them? Surely not. The word *out*, (אוֹת) signifies a *sign*, or *token*, of what may be expected: this is its usual import, and it may be so taken here. "Though *serebim* and *selunim* are instances—signs—similarities to what thou mayest expect, and with *scorpions* even, thou shouldst dwell—yet fear not." On considering this connection, I would enquire whether these three subjects are not all animals? and would refer to the *Millepedes*, or *Scolopendra*, or *Galley-worm*, or *great Iulus*, for the first two. We know that the bite of the *Scolopendra* is both painful and dangerous. They are common in hot countries; grow to the length of six inches; consist of many joints, and an equal number of legs." "Of this animal there are different kinds; some living like worms in holes in the earth, others under stones and rotten wood; so that nothing is more dangerous than removing these substances,

in places where they breed." Their legs have much the appearance of prickles or thorns.

If the second word, also signifies an insect, of a like nature or form, whether or not that which I have named above, then we see the uniformity of this passage; and the transition is easy from these to the *Scorpion*, whose qualities are greatly like those of the former insects; but he is certainly more irascible in his disposition, if not more powerful in his venom; which appears to form the climax intended by the sacred writer. For the *Scorpion*, vide plate, Rev. ix. [Vide Hosea, iv. 16.]

CHAPTER XIII. VERSE 11.

SAY unto them who daub with UNTEMPERED MORTAR, that it shall fall.

Not to pass this subject entirely without notice, though we have offered some remarks on it elsewhere, (vide FRAGMENTS, No. cxc. p. 188.) we shall annex an extract which may suggest the nature of this *mortar*, which the reader will recollect is *daubed* on the wall, by way of exterior decoration.

"Those buildings which are made of brick baked in the sun, they lay over them pounded straw to keep them from choping in the heat. They never lay the second lay, till the first be dry, nor is the second lay to be so broad as the lowermost. Those buildings which are made of brick baked in the sun are very handsome; and after the wall is raised, the mason plasters it over with mortar made of potter's clay, mingled with straw, that the defects of the building being covered, the wall appears very firm and close. Then the workman plasters the mortar over again with a lime mixt with Muscovy green, which he pounds with a certain gum, to render the lime mixt more glutinous; and then rubbing the wall over with a coarse brush, it becomes as it were damasked and silvered, and looks like marble. The poor are contented with only bare walls, or some coarse daubing, that costs little." TAVERNIER, *Travels in Persia*, p. 147.

CHAPTER XIX. VERSE 2, &c.

WHAT is thy mother? a LIONESS? She lay down among LIONS, she nourished her WHELPS among YOUNG LIONS. She brought up one of her WHELPS; it became a YOUNG LION; it learned to catch the prey; it devoured men. . . . She took another of her WHELPS, and made him a YOUNG LION.

This passage elucidates fully the meaning of the

the words to which it alludes; and there is neither ambiguity in their usage, nor can their application be doubted.

1. A LIONESS, *labia*; this must be a *lioness*, not a lion, because it is called *mother*. Vide Gen. xlix.

2. LIONS, *ariuth*. This word, having the feminine form, denotes, I rather think, not (male) lions, because the word for them has the masculine form *ariim*, but rather full grown *lionesses*, creatures of great bulk and power; and this agrees well with

3. YOUNG LIONS, *cephirim*, rather, *strong* (male) lions—at their maturity, in their prime. Vide Job. iv. 11.

4. WHELPS, *guriah*. These whelps may be of either sex; the feminine is used, no doubt, by custom; perhaps, too, by propriety of nature, as the number of female cubs born may exceed the number of males. One of these *whelps* was favoured by its dam, who nursed it up till it became *cephir*, a strong, powerful, rapacious, animal, capable of ravaging for itself: this being unfortunate, she took another of her *guriah*, and made him a *cephir*; and he roved among the *ariuth*, lionesses, and a *cephir* he was. The passage is clear, and may be compared to the description given by Horace, lib. iv. Ode 4. of a sturdy vigorous young lion, trying his new teeth on a youngling, surprized by him in his ravages.

*Qualemve letis caprea pascuis
Intenta, fulvæ matris ab ubere
Jam lacte depulsum leonem
Dente novo peritura videt.*

CHAPTER XXIX. VERSES 3, 4.

I AM against thee, Pharaoh king of Egypt, the great DRAGON, *tanim*,—that lieth in the midst of his rivers—(canals) which hath said, My river is my own, I have made it for myself. I will put a hook in thy jaws, and I will cause the fish of thy rivers to stick to thy scales, and I will bring thee up out of the midst of the rivers, . . . and will leave thee in the wilderness. I have given thee for meat to the beasts of the field, and to the fowls of the heaven.

We have in several places endeavoured to give a more correct idea of the nature of *Dragons*, than our translation has attempted: the *tanim* we have uniformly referred to the class of *amphibia*, and this instance we suppose, may fairly be included. A *Dragon* is a great serpent, but these words refer rather to that great lizard, the *Crocodile*, than to any serpent. As we have already admitted *lizards* among *tanim*, (vide *Gecko*

Deut. xxxii.) we must now admit the huge *Leviathan* also; and this is the passage which we should quote, in support of our opinion. As to the giving him “to be meat to the beasts of the field,” vide on Psalm lxxiv. 14.

As the word *amphibia* is hardly naturalized in our popular language, and as it includes, in a philosophic sense, several varieties, perhaps, in such a passage as this, the word REPTILE might be advantageously substituted for *Dragon*.

CHAPTER XXXI. VERSES 3, 8.

BEHOLD, the Assyrian, (was) a CEDAR in Lebanon.

The whole of this very poetical description of the cedar is well worth perusal. There is no doubt, that the word *aretz* means a *Cedar*,—but here the prophet adds, *IN Lebanon*, and our translators add the word *was*—they were aware that there is no mark of resemblance, (2) *like* a cedar in Lebanon; and that they could not say, “Assur is a cedar in Lebanon:”—but, when *was* Assur a cedar in Lebanon? meaning that Mount Lebanon north of Judea. We know no proof of this assumption. Suppose, therefore, we take this *Lebanon* according to the import of its root, “the snowy mountain;” and hint at the “snowy mountain”—Caucasus. [FRAGMENT, No. xiv. p. 37.] This would refer to the original station of that people, near *Kedem*; to the antiquity of that people, [vide Fragment, No. ccxlvii. p. 81.] and to the influence of that people on surrounding nations, in early times. This conjecture agrees perfectly with the mention of the *Cedars in the garden of God*—Paradise—adjacent to “the snowy mountain;” *all the trees of Eden*, &c. who envied the cedar, Assyria. For we cannot well take this *Eden*, and *garden of God*, for any place in Syria: it seems much more correct to refer here, as Balaam did anciently, to the “trees which the Lord had planted,” in that first, and best furnished habitation of man.

VERSE 8.

FIR-TREES, *beroshim*; CHESNUT-TREES, *oremenim*.

I do not know any competent authority for this rendering. The *Platanus*, or *Plane-tree* is thought to be the subject intended. Milton is certainly no authority as a naturalist; but, as a poet, he places his Eve in Paradise, “under a *platan*.” The lxx. and Vulgate render *Platanus*, a name derived from the breadth of leaf unfolded by this tree, and the extent of its branches. The luxury of shade in the East we have had frequent opportunities of remarking; and this, if any thing, must vindicate the frantic Xerxes for falling in love

love with a *Plane-tree*, and adorning it with golden bracelets. The shade of this tree fitted the place of its growth for being the scene of social enjoyment, and even of solemn sacrificial rites. *Pliny*, (lib. xii. cap. 1.) mentions some very extensive ones; and *Homer* describes the Grecian army as sacrificing under a tree of this kind. *Il.* ii. 307. *VIRG. Georg.* iv. 146. I pay great deference to Mr. PARKHURST, who says he had frequent opportunities of observing that the bark of the *Plane-tree* *peels off* from the trunk, leaving it *naked*; and, to a root signifying *nakedness*, he refers the Hebrew name. I shall, however, observe, that this seems to me like a defect of nature in this tree, which, whether it takes place in warmer climates, or where the tree is indigenous, requires clearer testimonies than I have hitherto happened to find.

CHAPTER XXXIII. VERSE 30.

ALSO, son of man, the children of thy people still are talking against thee by the walls, and in the doors of the houses, and speak one to another,—“Come, I pray you, and let us hear the word from the Lord.”

The ideas which arise in the mind of an English reader from this passage is, that the Jewish captives met each other accidentally, not by design; and seldom, not constantly; but it should be known, that in the East much traffic is carried on, and many businesses performed without doors, which our colder climate forbids. What hinders us, then, from supposing that these Jews, while engaged in their several occupations, made bargains and associations to attend the prophet's ministry, when they expected something curious or entertaining, some novelty of matter or manner?—they came not for devotion, but diversion. That this *might* be their conduct the following extract sufficiently proves; while it describes the occasion of their meetings, and the class of people who were guilty of this misconduct.

“The jealousy of the people of the East renders them unwilling to receive persons with whom they have business, in their houses. On this account, the artisans work without doors, and spend the whole day in open places. The streets are full of joiners, ironmongers, goldsmiths, jewellers, &c. busy in the exercise of their several trades. Thousands of workmen come in the mornings, work all day in the streets of Constantinople, and return in the evening to their houses in the country. If the same modes of life prevailed in Europe, and the greater number of the artisans and work-

men about our great cities lived in the country, these would then appear much more populous than at present.” NIEBUHR, vol. i. p. 19. *English Edit.*

CHAPTER XLV. VERSE 12.

AND the SHEKEL (shall be) twenty gerahs, twenty shekels, five and twenty shekels, fifteen shekels shall be your maneh.

The unusual manner of computation employed in this passage is very perplexing. We have already, in our Introduction to the book of Numbers, alluded to it, and regarded it as one of those ancient modes of numeration, on which we desire further information. To contribute in some degree to that information, I subjoin two passages from the Greek poet Theocritus, who apparently employs them as marking a mode of counting proper to rustics or country swains; a class of people that, it is well known, preserves by tradition and custom many usages, which politely educated persons relinquish for later improvements. In his fourteenth Idyllium, the poet represents a lover enumerating the days since he last met his mistress: “And now twenty and eight, and nine, and ten days are past, to-day is the eleventh, add two more, and there will be two months.” This mode of computing time might, *possibly*, arise from the return of periodical festivals, monthly, or weekly, &c. but, however that *might* be, it is not uncommon among ourselves to hear persons break into smaller portions a longer space of time than they can readily compute at once, to their own satisfaction; and then, adding them together, ascertain the whole. This is, usually, when such are in conversation, and when exercising the faculty of recollection. But we have in *Theocritus*, *Idyll.* xvii. another, and apparently a more confused manner of calculating a large number: for, enumerating the cities governed by Ptolemy, king of Egypt, the poet says:

“He has three hundred cities	300
Add three thousand	3,000
To thirty thousand	30,000
Twice three	6
And three times eleven”	33
	33,339

It will strike the reader's reflection to what mistakes of final numbers this method must be subject; and it strongly corroborates the idea suggested in the remarks on the book of Numbers, that the *abacus*-table was employed in such arithmetic. Perhaps it implies, too, that the manner of reading the strings of that table was not uniform;

form; for we find in this enumeration, the *hundreds* before the *thousands*; the ten thousands, (or *myriads*,) in the middle; and the *units*, if *units* they be, are put last. I notice this, as I verily think the remark is of some importance, toward settling the numbers of some places in the Old Testament, and toward detecting some causes of error. I shall therefore arrange the numbers *abacus*-wise, both as placed by the poet, and as they would be placed if correctly arranged, according to decimal notation.

<i>Hundreds</i>	..3..
<i>Thousands</i>	.3...
<i>Ten Thousands</i>	3....
<i>Units (Duals, 3)</i>	6
<i>Tens</i>	...3.
<i>Units</i>	3
33,339.	

Otherwise, it may be read, by as follows,

<i>Units</i>	3
— (<i>Duals, 3</i>)	6
<i>Tens</i>	...3.
<i>Hundreds</i>	..3..
<i>Thousands</i>	.3...
<i>Ten Thousands</i>	3....
33,339.	

The reader perceives at once that what would be indispensable in our manner of notation by decimals, which preserve a regular order and progress, has not been regarded by the poet, and probably was not attended to in practice: such want of arrangement might have no inconveniences to those accustomed to it; but it has many in respect to us, at this distance of time; and the same when it came to be expressed in writing, and other symbols to be substituted.—Is it at all to be wondered at, that inextricable perplexities should ensue?—perplexities inextricable to those who have never seen the application of a method of computation so totally different from their own.

AN
EXPOSITORY INDEX
TO THE BOOKS OF
DANIEL,
AND THE
MINOR PROPHETS,
ON SUBJECTS RELATING TO NATURAL SCIENCE.

CHAPTER II. VERSE 31, &c.

FOR some thoughts on the IMAGE seen by Nebuchadnezzar in his dream, and its signification, vide the dissertation annexed to the map of "Geographical Illustrations of Scripture Journeys," p. 11.

CHAPTER III. VERSE 1.

THE GOLDEN IMAGE OF NEBUCHADNEZZAR has been explained, and its proportions given, in FRAGMENT, No. cl. p. 113.

This is not like the former image, the creation of fancy, i. e. of a dream, and therefore susceptible of assuming any form and taking whatever measures and proportions fluctuating ideas may command; but, it is a real and substantial figure, and therefore must conform to the regular proportions and parts of the human figure, in its general and customary beauty.

A question may be raised on the *cubit*, by which the prophet proportions this figure: if it was the *Babylonian* cubit, which exceeds the ordinary measure $\frac{1}{8}$, then this figure may be taken as 100 feet high; very nearly equal to the famous *Colossus* of

of Rhodes, which might be about 104 feet. The Colossus of Nero, dedicated to the sun by Vespasian, was still larger: it could not be less than 115 feet.

For some thoughts on the Furnace into which the Hebrew youths were cast, vide the plate.

CHAPTER IV. VERSE 33.

NEBUCHADNEZZAR was driven from men, and did eat grass as oxen; his body was wet with the dew of heaven;—his hairs were grown like eagles' feathers, his nails like birds' claws.

This passage, in all probability, should not be taken too literally. That Nebuchadnezzar suffered under mental derangement, may be admitted; but those can be ignorant persons only who suppose he was changed into an animal of any kind. It is no uncommon thing for deranged persons, in our own day, to fancy themselves kings and princes, or haunted by wild beasts, or to assume the actions of wild beasts; the same, no doubt, was the change in Nebuchadnezzar, from the exercise of rationality, to the absence of his mental powers; or rather their suspension for a time; but the change was remarkable in him, who had been a warrior, a politician, a sovereign, of no ordinary description; who had been indeed a head of gold: Vide chap. i.

Driven from men; not from his own palace-demesnes, perhaps, though certainly removed from his office; but probably attended in some secluded part of his park or garden, with proper care, till his health returned, as had been foretold. In this state, *he did eat—vegetables*—such as he found around him, such as man in his savage state lives on, depends on finding as food; and sometimes grass itself; the word is not *desha*, green grass,—but one implying vegetation generally. He was indeed, during this time, a wild man of the woods, and did not even by night always retire to his den, but, eluding his keepers, exposed himself to the dews, or mists, which fall evening and morning; nor was any care taken of his person, but his hairs and nails grew without *trimming*, to a greatly disfiguring length. The word for eagle is *nesher*, and for bird, is *tzippor*; which seems to be taken generally. We have repeatedly noticed both words.

I would further remark, that we have no account of any violence committed by this fallen prince, while in his deranged state; so that we may safely, it appears, consider him as one of those maniacs of milder kind who do no hurt, but whose minds being alienated, they wander about, melancholy, abstracted, imbecile; not violent or outrageous. This supposition agrees with

the course of similar diseases in some of our greatest men. Nebuchadnezzar had been a warrior, had probably exerted his mind beyond its genuine powers; had, in short, worn out his rational faculties before his body was worn out; he had also been a contriver, a man of enlarged capacity, as a king, as a builder, as a legislator, perhaps; (and this might give the more importance to the prophecy preserved under his name). Is it uncommon for such men to become *effête*, to sink into inanity? Alas! no:

From Marlborough's eyes see streams of dotage flow;
And Swift expires, a driveller and a show!

Nebuchadnezzar, however, did not *expire* a driveller; his health was restored to him; he resumed his dignity for a time; but his constitution was too much shattered to last: he soon bid a final farewell to his station and the world; at the same time foretelling the fate of his kingdom, as we learn from Herodotus, who also informs us, that madness was afterwards called “the royal disease,” by which succeeding kings of Babylon were afflicted, to the destruction of neighbouring states, and the vexation of their own subjects.

CHAPTER VI. VERSES 23, 24.

MY God hath sent his angel, and shut the Lions' mouths.

Daniel's deliverance from the lions is one of those remarkable circumstances which may justly be reckoned miraculous, when accompanied by others which contribute to characterise it. A mere escape from the jaws of a lion is no miracle; we have several histories to that effect; and the story of *Androcles*, who, having drawn a thorn from the foot of a lion, was afterwards recognized by him, whether true or false, may shew the opinion anciently entertained on the subject.

I shall, however, relate a story of unquestionable truth, which happened some years ago among ourselves. In the Tower of London, the dens where the lions are kept are large wooden cages, divided into two rooms, which open into each other; and the custom is every day to turn the creature into one of them, while the other is cleaning. It happened, that the man who was accustomed to feed and clean these lions, having commanded one of them to go out of the den where he lay into the other, he supposed the lion had complied, as usual, and unsuspectingly went into the den, to clean it; the lion however, had remained in his den; and advancing up to the man, smelled him, licked him, and examined him all over; then, without hurting him, went away, and laid himself down quietly. N. B. The man had the

the precaution to put his hands carefully into his coat pockets, lest the rough tongue of the lion should draw blood, and the taste of that blood should excite the lion to voracity. I have this story from a lady who superintended the lions at the time, and who nursed the litters of whelps, born in the Tower. Nevertheless, such an event, though remarkable, is no counterpart to the history of Daniel; it has not the justifiable occasion of a miracle, the *dignus vindice nodus*. I introduce it only to confirm what I have elsewhere

stated, that a fact related is, occasionally, less the miraculous part of the history, than time, place, prediction, competition, or other circumstances which give a consequence to it; and, indeed, on which it depends for (extraordinary) claim to importance.

Daniel's vision of compounded wild beasts, &c. are emblematical, and therefore evidently beyond the province of the naturalist. For thoughts on some of them, vide FRAGMENTS, No. cxlvii. p. 109.

H O S E A.

CHAPTER IV. VERSE 16.

ISRRAEL slideth back, as a BACK-SLIDING heifer.

"*Parah sorera*, designs properly a cow which has been stung by a *gad-fly*, *gnat*, or other insect, and is thereby rendered ungovernable: therefore the lxx. have rendered this passage by the word *paroistresen*; as they rendered the *serebim* of Ezek. ii. 6. by *paroistresousi*. These two places give us occasion to speak of a little animal known to the ancient poets; which the Greeks called *oistros*, the Latins, *asilus*, or *tabanus*," [the GAD-FLY.] Has the word *serebim* in Ezekiel any relation to the *sarar* of this text, as the coincident renderings of the lxx. would lead us to believe. "The Arabs call *sarran*, a species of *gnat*, which particularly incommodes mankind. We read in *Meninski*, Lex. 2643. of "a great bueish fly, having greenish eyes, its tail armed with a piercer, by which it pesters almost all horned cattle, settling on their heads, &c.: often it creeps up the nostrils of asses. It is a species of *gad-fly*, but carrying its sting in its tail." [The ZIMB of *Ethiopia*, &c.?]

These are the sentiments of SCHEUZER; the reader will perceive how greatly they support the idea thrown out on the passage in Ezekiel, that the three creatures there mentioned were all of them *insects*.

The *gad-fly* is a *flying* insect; but as a cow may be bit, or stung, by a *creeping* insect, in her legs, &c. we are not obliged to suppose the *gad-fly* is the *only* insect to which this circumstance may refer; if the *sarar* may be a crawler, then its connection with the scorpion is more direct, (as that creature does not fly,) if related to the *serebim* of Ezekiel.

Beside the *scopolendra* to which we have referred as above alluded to, there is in the East a

kind of ant, whose bite is little, if any thing, less pungent and dangerous than that of the scorpion.

CHAPTER V. VERSE 12. 14.

I WILL be unto Ephraim as, 1. a MOTH; and to the house of Judah as, 2. ROTTENNESS... as, 3. a LION, as, 4. a YOUNG LION.

1. MOTH, *osh*. Vide Job. iv. 19.; xiii. 28.

2. ROTTENNESS, *rakah*; more properly, perhaps, a gradual *decay*, a kind of consumption. In Prov. xiv. 30. we read the same word, "envy is rottenness of the bones;" an eating—corroding—decaying principle, acting slowly but surely; and not only preventing the effects of nourishment, but counteracting it. This agrees well with the nature of the moth; yet as the moth is a living creature, it may admit some doubt whether a living creature, occasioning rottenness, may not be meant here; as we know that many diseases arise from worms, &c. dwelling in the body: witness that terrible cause of decay, the *tape-worm*. Moreover, insects are thought by many naturalists to be very active and very frequent promoters of decay; they devour timber and stones, no less than garments and flesh.

3. A LION, *shachal*. This species we have considered as the *black lion*. Vide on Job iv. 10.

4. A YOUNG LION, *cephir*. Vide Ezek. xix.

CHAPTER VIII. VERSE 9.

FOR they are gone up to Assyria, a WILD ASS, alone by himself. WILD ASS, *para*, vide Job xxxix.

The phrase *alone by himself*, is, perhaps, hardly correct: we know that the wild ass goes in troops, and a *stray* wild ass can hardly be intended to describe the powerful kingdom of Assyria.—Nor can

can we well refer this *solitary* wild ass to Israel; because Israel and Ephraim are spoken of as *they* before and after. We must therefore take the word (בורר, *burar*), as coincident in some degree with, the word *bar*, *barar*, a desert, or solitary place (not person): the phrase will then signify, "Assyria is the wild ass of his own domain, of those uncultivated regions where he roams;" which is at once correct, as to the nature of the wild ass; and agrees to the description of that power; no less than that of Ishmael as a wild-ass-man, does to his character, and that of the tribes descended from him. Gen. xvi.

CHAPTER X. VERSE 4.

JUDGEMENT springeth up as HEMLOCK, in the furrows of the field.

HEMLOCK, *rash*. This word in general signifies *venom*: the comparison here is to a bitter herb, which, growing among corn, overpowers the useful vegetable, and substitutes a pernicious weed. If the comparison be to a plant growing in the furrows of the field, strictly speaking, then we are much restricted in our plants likely to answer this character; but if we may take the ditches around, or the moist or sunken places within the field, also, then we may include other plants, and why not *hemlock*? SCHEUZER inclines to this, rather than *wormwood*, or *agrostes*, as the LXX. have rendered.

I suppose the prophet means a vegetable, which should appear wholesome, should resemble those known to be salutary, (as judgement, when just, properly is); but experience should demonstrate its malignity, as unjust judgement is, when enforced. Hemlock is poisonous, and water-hemlock, especially; yet either of these may be mistaken, and some of their parts, the root, for instance, may be received—but too fatally.

JOEL.

CHAPTER I. VERSES 4, &c.

THAT which, 1. the PALMER-WORM hath left hath, 2. the LOCUST eaten; . . . 3. the CANKER-WORM. . . . 4. the CATERPILLAR.

Here are four creatures mentioned, whose original names are *gazam*, [גזם]; *arbeh*, [ארבה]; *ialek*, [ילק]; *chasil*, [חסיל]: they occur again, but in a different order, chap. ii. 25. Are they the locust in its different states? Are they different

CHAPTER XIII. VERSES 7, 8.

I WILL be unto them as, 1. a LION; as, 2. a LEOPARD; . . . as, 3. a BEAR; . . . as, 4. a LION: the, 5, WILD BEAST shall tear them.

1. A LION, *shachal*, the black lion. Vide Job iv. 10.

2. A LEOPARD, *nimmer*, perhaps the hunting leopard. Vide Isaiah xi. 6.

3. A BEAR, *dub*. Vide 2 Kings xvii. 8.

4. A LION, *labiah*; rather a *lioness*, which having cubs, is fiercer than a lion. Vide Gen. xlix.

5. The wild (creatures) of the field—the common field—distinct from the desert—shall tear them.

CHAPTER XIV. VERSE 7.

THEY that dwell under his shadow shall return, they shall revive as the corn, and grow as the vine: the scent thereof shall be as the wine of Lebanon. . . . "I am like a green fir-tree"—From me is thy fruit found.

I presume the comparison here is to corn, which, though it be long buried, yet revives and sprouts; and to a vine, which, though destroyed, yet if a root of it be left, will shoot fresh stems: *q. d.* They shall start afresh in their growth, who have been protected, by being cast under his shadow; they shall revive as corn—*tagon*—shall re-grow as the vine—*gophen*—their fragrance shall equal the wine—(*iin*, *wiin*) of Lebanon.

Green fir-tree, *beraush ronan*, widely spreading its branches—shewing flourishing vegetation,—but yielding no edible fruit. The answer to this self-abasing description is,—“I will furnish thee with fruit.” For this tree, vide 2 Sam. vi. 5.

kinds of locusts? Are they different insects, appearing in succession during the same season?

1. **GAZAM** occurs also, Amos iv. 9. The Jews think it to be a kind of locust.

Bochart (vol. iii. 443.) says, *Gazam* is a kind of locust, furnished with very sharp teeth, with which it gnaws off grass, corn, leaves of trees, and even their bark. The Jews support this idea, by deriving the word from *guz*, or *gazaz*, to cut, to shear, to mince. This sharp instrument has given occasion to Pisidas to compare a swarm of locusts to a sword with ten thousand edges.

B b

Not

Notwithstanding the Jews unanimously take this creature for a locust, yet the lxx. read *καμπη*, and the Vulgate *eruca*, a caterpillar; which rendering is supported by Fuller, *Mis. Sac. lib. v. cap. 20*. Michaelis agrees with this notion, and thinks the sharp and cutting teeth of the caterpillar, which, like a sickle, clear away all before them, might give name to this insect. Caterpillars also begin their ravages before the locust, which seems to coincide with the nature of the creature here intended.

2. ARBEH. Vide plate of *Locust*.

3. IALEK. If the first of these predatory insects is not a locust, then we are under no necessity to suppose all that follow to be locusts; but may seek other insects, analogous to what is required by the prophet's description. In the opinion of Adam Genselius, (*Eph. Ger. Cent. vii.*) *ialek* is an insect which principally ravages the vineyards; called by the Greeks *ἵπς*, *ἵπις*. Pliny, lib. xviii. cap. 18. calls it *convolvulus*, *volvox*; Columella calls it *volucra*; Plautus, (*Cistell. Act. iv. Sc. 2.*) calls it *involverus*, because it deposits its eggs in the leaves, and occasions them to roll themselves up. It is well known wherever the vine is cultivated. Vide Psalm lv. 27.; Jer. li. 27.

4. CHASIL. This word in *Deut. xxviii. 38*. denotes a *consumption*, or *destruction*, occasioned by the locust; and the Chaldee employs it to denote *ravage*, Nahum iii. 16. It appears, however, in this place to denote a ravaging insect, and one which, coming after the others, devoured what they had left.

Are all these insects to visit this land in the same year? If so, a strict attention to the times of the ravages of swarming insects, would help to clear this difficulty: the Jews say, these *four* insects should come in *four* years; but this seems hardly consistent with the hint, that one should devour what the other *had left*, which certainly leads us to the same year, though to a later season of it.

These insects are found in Egypt; for the Psalmist says, *Psalm lxxxviii. 46*. "He gave their increase to the *chasil*, and their labour to the locust,—*arbeh*:" and *Psalm cv. 34*. "He spake,

and the locusts—*arbeh*, came; and the *ialek* without number." From what this *chasil* is said to have devoured in Egypt, I would not be sure whether the WEEVIL, or COCK-ROACH, is not this insect; if it devoured the *stores* of the land, what was laid up for future service, it may well come after all the other ravages; and well be called a *consumer*, as those who, on long voyages, have had the WEEVILS get at their bread, can amply testify.

The lxx. seem to mention four kinds of locusts, *καμπη*, *kampé*; *ἀκρίς* *akris*; *βρυχος* *brouchos*; *ερυσίβη*, *erusbé*: the Vulgate also, *eruca*, *locusta*, *bruchus*, *rubigo*: caterpillar, locust, chafer, rust, or blight; which last is not an animal (apparently), but a disease which attacks plants, as vines, wheat, &c. (but I find some persons think it to be an insect.) If four kinds of locusts are intended, the circumstance of their coming all in one year is truly tremendous; but we find the locust has four names, in four states: may this be the reference of the prophet?—But how will this agree with other Hebrew names? Vide on Lev. xi. 20.

The remarks following, are translated from SCHEUZER. *Damir*, an Arabian author, mentions yellow, white, red, black, large, and small locusts. *Marcellus Vigilus*, Diosc. lib. iii. says, "Nature has varied the locusts by an admirable effect of art. There are green, black, yellow, and mottled. Some while flying appear of a colour very different from what they are of when at rest. Some have single wings, others double, others none at all, yet leap; and some possessing neither of these qualifications, only crawl. Some have long legs, others very short; in these the joints are more numerous, and nearer to each other; in those they are fewer, and more distant. Some sing, others are silent; some are heard all day long, others only during the obscurity of night. Some do no injury to man, or to the fields; but are easily taken by children; others consume and destroy the whole seeded fields of a province, and by the famine which succeeds their ravages, not infrequently expel the ancient inhabitants from their paternal residences."

A M O S.

CHAPTER IV. VERSE 9.

I HAVE smitten you with BLASTING and MILDEW: when your gardens and your vineyards, and your fig-trees, and your olive-trees increased, the PALMER-WORM destroyed them.

1. BLASTING, *shedephon*. I apprehend that this word implies blight on corn, &c. Possibly that kind of blight which some persons think is occasioned by insects; but SCHEUZER thinks "it is that which shews itself under the appearance of a black dust, within the grain of corn; or that which

which in a wet season swells the grain, and blackens it on the outside, while the inside remains white. Corn thus injured has something venomous with it, and is called *ergot*, hardened, horned." Or, a kind of rust, which settles on the corn, and blights it. I have examined corn under these states, and to one of them, I presume, this word refers, but cannot determine to which of them. They are equally dreaded by agriculturists.

MILDEW, *irekun*; a dew which falls upon corn, and corrodes the grain; an injurious moisture furnished by the atmosphere, probably; and therefore not improperly called a *dew*; q. MAL-dew?

3. PALMER-WORM, *Gazam*, vide on Joel.

CHAPTER IX. VERSE 3.

SHOULD they hide themselves at the bottom of the sea, I would command the serpent, nachash, and he shall bite them there.

BITE OF THE SEA-SNAKE. On this subject, the following article, (written by a medical man) copied from a *Calcutta paper*, deserves attention.

"A melancholy proof against the too prevalent but mistaken idea of the harmless nature of the common Sea-Snake, has been clearly evinced in the following fatal occurrence, which took place in this vicinity a few days ago, which I deem it expedient to communicate to you, with the view that it may be rendered public. Early in the morning of 24th ult. a stout young man, about 22 years of age, a *mucqua*, or fisherman, belonging to Poodiangurry, a small village in the neighbourhood, about two miles from the shore, about 9 a. m. upon hauling in his net, found a common sea snake entangled in it. He seized the snake by the back to disengage it from his net, conceiving it perfectly harmless, when it instantly bit him on the point of the middle finger of the right hand; he threw the snake into the sea, and thought nothing of the bite. He came on shore about an hour afterwards, when he complained of a slight pain in the affected finger, which extended along the inside of the right arm. He walked homewards about half a mile from the beach, but, towards the latter part of his journey, complained of giddiness and weakness in his loins and lower extremities, and was obliged to be supported by his comrades the rest of the way.

"Soon after he reached home, his friends procured a native doctor of his own caste to administer to him; but even then, neither the person who was bitten, nor any of those around him, pos-

sessed the most remote idea of danger, or in fact that any serious consequence was likely to result from the bite.

"About three p. m. he complained of very great pain in the wounded finger and all along the right arm; shortly after this, the upper and lower extremities were seized with violent spasms, accompanied with giddiness, nausea, vomiting, and a dimness of sight. Towards night all these symptoms increased, attended with great restlessness, and excruciating pain in the right hand and arm. About two o'clock on the following morning, he became *comatose*, and was occasionally seized with convulsions, until he died, which was about 24 hours from the time he had been bitten.

"On inspection, there appeared upon the point of the middle finger of the right hand, a mark just sufficient to shew that he had been bitten, but no swelling about the finger, hand, or arm, nor were the axillary glands of the right arm at all enlarged. There appeared a much greater degree of rigidity about the body, for so recent a corpse, than I ever recollected to have seen, but no diseased enlargement of the body. Upon examining the people who were in the boat with the unfortunate sufferer, they all declared having seen the snake, and that it appeared to them to be exactly of the same kind as they are accustomed to see numbers of daily, when employed fishing, but never, until the present, has an instance been known amongst them of any serious consequence following from the bite of these snakes.

"Twelve p. m. of the 30th.—Just as I finished the above account, another case was brought on shore from one of the boats to my house. The man had been similarly employed, and was bitten on the back of the fore finger of the right hand, about one hour before he was brought to me; the wound was very distinct, but as yet unattended with material pain. I placed a tight ligature upon the arm, scarified freely the wounded part, and rubbed it smartly for some time with a strong solution of lunar caustic, administering liberally the spirit *ammonia* internally. He suffered very severe pain in the affected hand, from two o'clock until about six, but was next morning quite well, though weak. The snake was described to be of the same kind with the former, but much smaller.

Your's &c.

"Calicut, 7th July, 1807.

"S. MEEK."

* * Some years ago a dog was bitten by a sea-snake, near Goa: the bite proved mortal.

[Vide DRAGON, Rev. xii. Plate.]

JONAH.

J O N A H.

JONAH is among the oldest prophets whose writings are come down to us: he seems to have had somewhat of a peculiarity in his character, which we should, in the present day, call *capricious*. That Jonah, conscious of having received a divine commission, should think of *evading* that commission; and after much thought, should endeavour to execute his plan of evasion, is a striking inconsistency of principle:—it seems to indicate a rashness of mind, not easily to be controuled,—a warmth of temper, perfectly correspondent to that irritability manifest in his subsequent behaviour. In what manner, and to what degree, this disposition of Jonah's mind might influence his language, as well as his conduct, is a speculation into which it might be of some use to enquire. It may be thought to have given a tone to his style, which discovers itself not merely in tokens of forcible conception, but in a manner of diction not general to the other prophets. To explain this idea, observe, Jonah says, he intended to “flee from the presence of the Lord;”—not meaning to deny the ubiquity of the Lord, but using this powerfully significant phrase, to express his proposing a long voyage: so, “the Lord sent out a great tempest,” to express the occurrence of a storm; other interpositions of providence also are expressed with unusual emphasis:—the LORD prepared a great fish,—prepared a gourd,—prepared a worm,—prepared an east-wind. No doubt, whatever is *prepared*, is prepared by God in his providence; but so is the whole course of nature, and of natural events; and while we admit this, we should cautiously distinguish between what are events according to the usual and customary course of things, and what, being *contrary* to the usual and customary course of things, is designed to excite peculiar attention. Nor is this all; for if we desire to understand an author correctly, we must examine and understand the style and phraseology employed by him in narrating events. These expressions may safely be attributed to the piety of the prophet Jonah. I believe, with him, that God *prepares* a gourd to rise over our heads, to deliver us from grief; and that he *prepares* the worm, which destroys that gourd: but since the growth of this gourd is according to nature, and the action of the worm is according to nature, also, it would sound very strange, in our language, to attribute these to an immediate exertion of creative power; a direct and absolute *preparation*, in the sense of

calling them into being for this express purpose. But, though it would sound strange to us, it would not sound equally strange where the fact occurred. In that country the reference to Deity would be well understood, and the hearers would attribute to the phrase a sense much like what our own good people understand by the word *Providence*, among ourselves. We should startle at hearing a person say, “God broke my leg”—“the Lord prepared me a fever;”—“the Almighty turned aside from me a cannon ball.” These ideas others would express by saying,—*Providence* visited such an one with a broken limb;—*Providence* laid aside A.B. by means of a fever;—he was *providentially* missed by that bullet.” The former course of language, would be thought a *peculiarity*, not common speech, not the current language of the time and place; but an emphatical phraseology, raised by piety above common speech, and attributable to a deeper theological view of things than could fairly be supposed of our compatriots at large; and this seems to have been the case in respect to Jonah. Deeply sensible of the divine mercy, deeply grateful for the deliverances he had experienced, deeply feeling their benefit, he has derived every thing from God, the great Author of all things, and of all events;—with the utmost propriety, in a theological view: there can be no doubt; but still the question recurs, whether these events, thus described, differ *essentially* from natural occurrences, and how far they differ? whether they be any thing more than *interpositions of Providence*? and whether, when we have applied to them our usual conception of such *providences*, we have not received them in the same sense as the prophet would offer them were he alive now, and writing among ourselves. When Jonah says, the Lord prepared a gourd, we are not to understand the *creation* of a gourd, purposely causing this plant to grow where it naturally would not have grown; but, that this plant, growing in its natural and suitable place, Providence pointed it out to Jonah as a shelter. In like manner, when this gourd had reached its full size, the worm which struck it, was obeying merely the course of its own nature; it was not a worm made expressly, at the instant, for this purpose only; nor a worm carnivorous by nature; but of a species whose regular food had been found in other gourds the year before, and would be the year after. The blowing of the east-wind also, and the intense heat consequent on it, was not singular.

But

But what should we think of a traveller, who told us, that "at Nineveh, the Lord *prepared* a violent east-wind to beat on his head"? His piety it would be thought, had at least vitiated his taste in writing; and though nobody of reflection could possibly doubt the fact, yet the phrase which described that fact would be severely exposed to the censure of criticism; and would be considered as indefensible by those who desire plain matter-of-fact narration, not *emphasis*, whether poetical or theological.

These reflections on the evident temper of Jonah, and on the possible effect of that temper on his style, are intended to restore that style to its true import. This prophet has had extraordinary bad luck among his Jewish interpreters; who conceiving that every thing belonging to him, as well as himself, was altogether unusual and unaccountable, have extracted from his writings wonders after wonders. They have made him the son of a womb almost, or absolutely, dead; they have brought him to life again, after being dead; they have created for him a great (male) fish, and finding that not sufficient, they have kindly favoured this fish with a (female) companion: nor is this all; for to convey him safely to Nineveh, they have moved, if not heaven and earth, yet land and water; rocks and mountains, shallows and sand-banks: continents themselves, have been no obstacle; and what may almost justify some degree of anger in a naturalist, they have composed such a fish for the conveyance of Jonah as has never been seen either before or since, and who has left none of his progeny behind him, to satisfy that curiosity which such a *non-descript* cannot fail of exciting.

Whether it has been wise in translators to acquiesce at all in the tales of Jewish rabbins, is a question which must be left: whether our own translators could have done better than they did, is beyond our ability to determine: without imputing blame to them, it may be asserted that this subject, with others which cannot have escaped the reader, demonstrates the necessity of an acquaintance with something beside divinity in those who read the Scriptures, even for the express purpose of drawing from thence every sentiment and idea, connected with the most important of subjects.

The storm which overtook the fugitive Jonah, was an occurrence of nature, over-ruled by *Providence* for a particular purpose; and this is all we need to suggest.

CHAPTER I. VERSE 4.

THE Lord sent a great wind—a hurricane, a typhon, as the Greeks call it, a typhonic wind,

Acts xxvii. 14. [what our seamen called *tuffoon*]. This wind is a combat of two, or three, or more winds, which, rolling in vast eddies, strike a vessel most terrible shocks, raise the waters into tremendous billows; and, on land, root up trees, and destroy all before them. Such are of the nature of hurricanes.

VERSE 7.

The seamen cast lots.—This is not always the word used for this action. In Prov. xvi. 33. we read of the lot cast into the lot-vase, which is expressed by *iuthal*, not as here, and in many other places, by *ipel*. This seems to suggest at least two ways of appealing to the lot; and possibly when lots are said to *come forth* to such an one, the use of the lot-vase, may be intended. We can hardly suppose that the seamen had a lot-vase on board this ship; perhaps something like throwing of dice is meant in this passage, and expressed by this word.

VERSE 17.

The Lord prepared a GREAT FISH which swallowed Jonah. This subject, being miraculous, naturalists may be dispensed with from investigating it. We know not any fish which is capable of containing a *living* man for three hours, much less for three days, in health and safety. The digestive process in fish is so rapid, that when one has swallowed a tolerably long prey, a prey filling his mouth, it is partly digested at the *entering* end, while the other is perfectly fresh: this is thought to be the reason why fish are always hungry, always ravenous. Moreover, we know no fish large enough to contain a man, except a whale, whose swallow, or gullet, is so narrow that no man could creep through it; or a shark, whose terrible rows of teeth threaten destruction to all that goes in or comes out. Nevertheless it is certain that whales of considerable size, (even 60 feet long,) have been found in the Mediterranean Sea; and that sharks prowl every where for prey. It is certain, too, that a human body has been found in the stomach of a shark; whence it is clear that this fish is able to swallow so large a subject; though a whale cannot. Moreover, a whale does not feed on living flesh, as the shark does; it is by no means a voracious animal; and therefore if a *huge fish* be really intended in this history, the shark bids fairest to answer the character required. But, if the same word may signify a *float*, generally, vide *Dagon*, plate, Sam. v.

CHAPTER IV. VERSES 6, 7, 8.

THE GOURD of Jonah should be no trivial lesson to theological disputants. So long ago as the days of *Jerom* and *Augustine*, those learned and pious

pious fathers differed, as to what plant it was; and they not only differed in words, but from words they proceeded to blows; and *Jerom* was accused of HERESY at Rome, by *Augustine*. *Jerom* thought this plant was an ivy, and pleaded the authority of *Aquila*, *Symmachus*, *Theodotion*, and others: *Augustine* thought it was a gourd, and quoted the *Seventy*, the *Syriac*, the *Arabic*, &c. &c. Had either of them seen the plant? No.—Which of them then was right? Neither.—Let the errors of these pious and good men teach us to think more mildly, if not more meekly, respecting our own opinions; and not to exclaim Heresy! or to enforce the exclamation, when the subject is of so little importance as—gourd *versus* ivy.

Nevertheless, there is a just importance in this subject, as well as in others; and if “all the works of God are good, and nothing to be refused,” so the most minute plant or insect mentioned in the Word of God, demands our best endeavours to obtain a competent acquaintance with it; and even a scientific knowledge of it is “not to be refused.” We have formerly thought that the *el-kerua*, or *ricinus*, was the *kikion* of *Jonah*: and we quoted from *NIEBUHR*, those accounts of it which seem to agree with its history. This idea is supported by the major part of the Rabbins, and by a list, too long to repeat, of writers on the same side of the question. The *ricinus* is well known in the East; it grows very high, and projects many branches and large leaves. It is known, too, in the

West Indies, in several of its species, some of which have been cultivated in Europe. They were first planted in England A.D. 1562. It is often called *Palma Christi*; but we must remember the probable difference between plants of the same class, growing in different countries.

The *ricinus* in a short time reaches a considerable height. Its stem is thick, channelled, distinguished by many knots, hollow within, branchy at top, of a sea-green colour. Its leaves are large, cut into seven or more divisions, pointed and edged, of a bright blackish shining green. Those nearest the top are the largest. Its flowers are ranged on their stem like a *thyrsus*. They are of a deep red, and stand three together.

This plant is the *kiki* of *Herodotus* and *Dioscorides*. *Strabo* also mentions an oil drawn from the *kiki*. There is no doubt that it is the *el-kerua* of the Arabs; and the same plant as our castor oil, employed as a purgative, is drawn from.

With this description agrees the account in the prophet, of its rising over his head, to shelter it; for this plant rises eight or nine feet, and is remarkably rapid in withering, when decayed, or gathered. Vide FRAGMENT, No. lxxviii.

The WORM which struck the gourd of *Jonah* is called *tuloth*: this we have rather considered as a maggot, than a worm. It was, no doubt, of the species appropriate to the plant; but the name seems not to identify a particular species. Vide *Exod.* xvi. 20.; *Deut.* xxviii. 39.; *Isaiah* xiv. 16.

M I C A H.

CHAPTER I. VERSE 8.

I WILL make a wailing like dragons, *tanim*—
and mourning as the owls—daughters of screams,
ostriches.

Vide on *Lam.* iv. plate for the *Tannim*.

Vide *Lev.* xi. plate of Unclean Land Birds, for the Ostrich.

CHAPTER VII. VERSE 17.

THEY shall lick the dust like a serpent—*nahash*,—
they shall move out of their holes like worms of
the earth; like any skulking reptile that hides in
holes. This word, it is conjectured, should be
taken generally, not for worms, restrictively, but
for whatever reptile inhabits the ground.

N A H U M.

CHAPTER II. VERSE 11.

THE dwelling-place of the lions—*ariuth*; and the
feeding-place of the young lions,—*cephirim*;

where the lion—*ariah*—walked; the old lion,—*labia*;
the lion's whelp,—*gur*. The lion—*ariah*—did tear
enough for his whelps,—*guruth*; and strangled for
his lionesses,—*lebaat*. Vide on *Ezek.* chap. ii.

HABAKKUK.

HABAKKUK.

CHAPTER I. VERSE 8.

THEIR horses are swifter than leopards, more fierce than evening wolves; their horsemen shall spread themselves, and their horsemen shall come from far; they shall fly as an eagle that hasteth to eat.

I do not know that I should have troubled the reader with any remarks on this passage; had I not supposed that it has been misunderstood, not only by our translators, but by Mr. HARMER.

We have horsemen twice over, close together; this is one sign of incorrectness; the poetical prophet would not thus have written. This is one of the many places where *peresh* denotes not horsemen, but horses of a high breed: and as to the spreading themselves, it does not mean dividing themselves into small parcels; but when a race-horse, for in-

stance, in running at full speed, stretches out his fore-legs, to a great distance from his hind legs, he is said to *spread* himself, to "cover a great deal of ground," and the more ground he naturally "covers," the swifter he is. The evening wolves, we have already corrected into *desert* wolves. Thus understood, the passage would read more appropriately,

Their ordinary horses,—sus, are swifter than hunting leopards, nimmerim,—fiercer than wolves of the desert, [Vide Sheeb, plate Hyæna]; their horses of generous breed,—peresh, shall spread themselves to their utmost extent in running: their horsemen shall come from far, they shall fly as an eagle,—nesher—hasting to prey." This construction avoids tautology, is very spirited, and more than that, it agrees with fact and observation.

ZEPHANIAH.

CHAPTER II. VERSE 9.

MOAB shall be... the breeding of nettles, charul, and salt pits.

NETTLES; Vide on Job xxx. 9.

SALT PITS;—not pits yielding salt, as their natural produce; but ditches, pits, barren as salt itself. Vide description of Sodom, and on salt, Gen. xix.

VERSE 14.

FLOCKS shall lie down in the midst of her; all the beasts of the nations: both the CORMORANT and the BITTERN shall lodge in the upper lintel of it; DESOLATION in the thresholds.—How is she become a desolation! a place for beasts to lie down in!

1. FLOCKS, not, I apprehend, of sheep or goats, but of less gentle animals; all the wild vermin from neighbouring provinces: even,

2. The CORMORANT, *kaat*, the pelican. Vide on Lev. xi. plate of Unclean Water Birds.

3. BITTERN, *kippud*. Vide on Isaiah xxxiv. 11.

The latter clause shews clearly the nature of the flocks which precede it, i. e. wild beasts.

The word *choreb*, rendered *desolation*, is by many taken for a creature, particularly for the raven. The lxx, Jerom, Theodoret, and Cyrill, countenance this rendering; but incline to the *night raven*. We must identify this *night raven*, before we can determine on the propriety of their opinion: but, if the mode of spelling this word could be waved in point of objection, then the raven may be admitted; as *ghoreb* is the Arabic manner of pronouncing this name, which is sufficiently near to confirm the idea of those interpreters, who render *raven*.

MALACHI.

CHAPTER I. VERSE 3.

I HATED Esau, and laid his mountains and his heritage waste, for the DRAGONS of the wilderness. Better understood,—“Even Esau himself, as a nation, I did not love, equally with Israel; but

placed even in his mountains, or elevated grounds, SHEMAMAH, and gave even his lower grounds, or his shores, where water is, to TANUTH of the desert, such as usually abound on wastes by the sea-side.

1. SHEMAMAH. I cannot help thinking that
as

as the *tanuth* of the following clause are certainly creatures, so should this *shemamah* be; a creature which prevails and multiplies in waste and desert places. The passage usually referred to in support of the rendering *desolation*, rather confirms my suspicions. It is Joel iii. 19. where we read,

"The hills of Judah shall flow wine, milk,—waters, a fountain, &c." all great blessings; whereas, *e contra*, "Egypt shall be to (b) *shamamah*; and Edom to the desert-*shamamah* shall be." Here seems to be a distinction between these *shamamah*; and moreover, we must read *like* to a desolation, if that sense be retained; *like* to a wilderness-desolation: which the text does not express.

But the question still returns: What creature can this be? and this is the more important, because it may be asked also, has this *shemamah* any relation to the *shemamith* of Prov. xxx. 28? If it has, then we have to seek a creature which inhabits the lofty palaces of kings, yet the mountains of Esau: the valley of Egypt, yet the hills of Edom. After thinking this matter over, I would ask, whether we may take the *common fly* for this creature? It is true, this will reduce us to the necessity of taking *zebub*, a well-known Hebrew word for a *fly*, either generally, to signify flies of all sorts; or specifically, for some particular species; and whichever of these be chosen, then *shemamah* may signify the other. This is proposed only as a conjecture. *E. gr.*

The common fly *taketh hold with her hands*,—this we witness every day in summer; and her two fore paws are very justly called hands: the naturalist has no difficulty on that. *She is in the loftiest apartments of kings*; this is undeniable, in our own country, equally as in Judea: she is excluded from no place whatever. *The common fly inhabits Egypt*: this is notorious, from the united testimony of travellers. DENON mentions their incessant visitations, and even that gunpowder was exploded in a house, in order to destroy them: they were swept away in heaps; yet the walls of the room were filled with them, blackened with them as with grains of gunpowder. Do they breed on the mountains of Edom? Of this local habitation testimony is wanting; but they breed on desolate places, and swarm where there is little appearance of sustenance. It is no uncommon thing to read of swarms of flies obliging persons to carry lanterns, in order to preserve the light of a candle;

and many a habitation has been abandoned in a new settlement, because the teazings of the flies, and their destructive numbers were insupportable.

I incline to think, that *zebub* means a fly of a specific species. Isaiah viii. 18. "The Lord shall hiss for the *zebub*, which is in the land of Ethiopia,"—*i. e.* in the uttermost parts of the rivers of Egypt; meaning no common fly; for then, why go so far to fetch it? as flies are plenty enough at hand. To this agrees *Baal-zebub*, Baal-the-fly; no doubt the most considerable of the species, the prime of the genus would be selected for the deity. Our medals, [Vide plate, 2 Kings i. 2.] do not, as I perceive, sufficiently determine this question: yet the fly they present is not the common fly. It seems to be more like a wasp; it is very sharp at the tail; its wings are pointed, not rounded; its thorax differs, and its head is unlike; in short, whatever fly this is, it is not our common fly. For the sake of distinction, I assume that *zebub* signifies the great blue-bottle fly, or the flesh-fly: this being large, may well be supposed, when dead, to cause the *perfumed unguent of the dealer to stink*, Eccl. x. 1.; and this *shemamith*, *shemamah*, (both words in the plural?) may signify the common house fly, of whose swarms and whose bitings no one can be ignorant. This conjecture may keep its place till somewhat better is offered. In Exod. viii. 21. 31.; Psalm xxxviii. 45.; cv. 31. the word rendered *flies* is not *zebub*, but *oreb*; which is certainly the dog-fly, or *zimb*. [Literally, perhaps, the DESERT-fly.]

It might be started as a question whether the small kind of spider, which we have supposed the *shemamith* of Proverbs to be, might not also be the *shemamah* of this passage? and much might be said on the question, which is the more difficult of solution, as spiders abound where flies abound, which are their natural prey. Neither does etymology afford any aid:—*shem* signifies to dispose, to set off, to adjust, 2 Kings ix. 30.; and *shemam*, intensely, to adjust with great care; which may well express that incessant *brushing* of its eyes, &c. with its fore-paws, whereby it seems to be always adjusting itself, which is so remarkable in the common fly. This is usually referred to the web of the spider, a performance adjusted with mathematical precision.

The *Tanuth* of this passage have been considered on Lam. iv. plate.

END OF THE EXPOSITORY INDEX ON THE OLD TESTAMENT.

EXPOSITORY INDEX.

TO THE

NEW TESTAMENT,

OF SUBJECTS RELATING TO NATURAL SCIENCE.

INTRODUCTION.

AFTER having gone through the Hebrew writings, and noticed their appellations and descriptions of natural subjects, their applications, and their distinctions, little of the same nature remains to be done in the New Testament. This part of sacred Scripture introduces very few new articles to our notice; and those which it does introduce are seldom of prime importance to us, as naturalists. Those to which it refers, or alludes, are generally such as have occurred before in the Old Testament, and they are rarely, if ever, so well distinguished by name, or characterized by manners. For instance, in the Greek of the New Testament, a lion is a lion only, without any attention to distinguish whether it be the Hebrew *ariah*, *labiah*, or *shachal*: it may be either or neither of these, but of some other species: a viper is a viper, simply; but whether it be the *peten*, the *tzeboa*, or the *tzephuon*, is not indicated by the sacred writers; who, for the most part, addressing themselves to foreign nations, and writing in a foreign language, took no pains to apply the various Hebrew names specifically. If they conveyed their meaning intelligibly, though grossly, clearly, though not scientifically, they succeeded in what they undertook; they answered those purposes which engaged their labours, and this satisfied their minds. They sought higher rewards than the applause of men; they had nobler aims than to gratify the curious: and while they little cared for the nicer distinctions of human systems, in natural things, they were explicit in remarking that those divine things, whose histories they communicate,—“are written that ye may believe.”—Moreover,

The writers of the New Testament were men in humble stations of life, not like many of those who composed the Hebrew books, patronized by kings, promoted to high stations because of their talents; and bound, by their office, to the acquisition, or to the display, of more than common knowledge. These were favoured with

leisure, had the best models before them, could study and retouch their productions; and when they discoursed, they spake *ex professo*. No such advantages attended the apostles of Jesus: good common sense they had; sound heads, and warm hearts; but these are not all that elegance of style and regularity of composition demand, they are neither the origin of varied expression, nor of learned reference; they do not qualify for illustrations drawn from sources analogous, though distant; from allusions to the kingdoms of nature, to the productions of foreign parts, or to the scarcely understood distinctions among natural tribes, whether vegetable or animal, which flourished in their own country.

Add to this that the writers of the Old Testament occupy a long succession of ages: what is not known in one age, occurs in another; what has not fallen under the cognizance of an early writer, has been familiar to one who, at a distance of time, succeeded into his office; whereas, the writers of the New Testament are all of one age, as well as of one country; they have all one purpose to answer, and are full of that purpose; to answer which they direct all their efforts. Are they then without allusions to the productions, the analogies, the ordinary course of nature? By no means: they refer to the properties of vegetables, to caution lest any “root of bitterness,” springing up among the brethren, should poison the minds of those whom they address; they illustrate the doctrine of the resurrection, by reference to wheat, “sown naked grain” into the earth, but raised in its own proper foliage: they tell us, “star differs from star in glory;” they mention, too, clouds without water, trees twice dead; and bid us be aware of a lion whose roarings may disturb our peace; and of those unpurified in heart and life, who, like dogs, return to their vomit, or like a sow that has been washed, to her wallowing in the mire.

They did not, then, despise, or condemn the study

study of nature: surely not; but they made it conducive to their primary (religious) intention. They well knew, that "every work of God is great, and sought out of them that have pleasure therein;" and on proper opportunities, they could reason against the worship of sun, moon, and stars, by arguments drawn from nature, which disclaims them as divinities; they could remonstrate to the branches grafted into the good olive-tree, against the indulgence of pride, or the humouring of caprice; they could draw morals from the composition of the human frame itself; could persuade every member of a Christian church to seek the welfare of others, that there be no schism in the body; inasmuch as all members painfully sympathise with any one which is suffering: nay, the very heart of man, the very knittings of joints and members, furnish more than one simile, and illustrate more than one point of doctrine,—and that, too, with a power and a perspicuity truly admirable.

And indeed, had they discouraged, in the smallest degree, the study of nature, they would have contradicted and counteracted the principles of their Divine Master himself.—Who saw so extensively throughout nature as he did? who saw so minutely into nature, as he did? who conveyed instruction so agreeably, by the medium of natural knowledge? who directed his auditors to observations founded on nature, so frequently as he did? who united religion and information, piety and philosophy, the study of things pertaining to God, with the investigation of things occurring in nature? who associated, improved, and enforced them as he did? What part of nature has he left unnoticed? The sun in the firmament, the stars of the heaven, yield comparisons of future glory;

the beasts of the earth, the fowls of the air, and the fish of the sea, characterize the godly and the ungodly. We are instructed by the properties of good seed, and evil seed; we are referred to similes drawn from the grass of the field, the lily, the fig, the vine, the wheat, the tare, with many others; and among minerals, to the salt of the earth, and rocks, and stones, &c.;—among metals, to the purity of gold, &c. &c.; in short, every part of the world yields, as it were, a tribute of instruction and improvement, under the command of its mighty Master. Let this great example prove the efficacy of learning drawn from nature; and let it never be recollected, without recollecting also who should most benefit by these instructions. Shall *ignorance* of the works, the wonders, the operations of nature, perceive the propriety of those references; the correctness and strength of those inferences, the application of those remarks, equally with a mind which has attended to the natural subjects themselves?—The question needs no answer: a child cannot hesitate in determining it.

If we had not already considered what the Old Testament has offered, we should find abundant materials for our reflection in what the New Testament introduces to our notice; but, as we have no need to repeat our remarks, and are desirous of brevity in our observations, we shall notice principally what subjects are now mentioned for the first time; and shall consider all the books as making but one, though in distinct parts; rather than many, and requiring separations. To purposes of natural history, the four Evangelists form but one book; and the Epistles yield not more than may conveniently be combined together.

M A T T H E W.

CHAPTER II. VERSES 2, 9.

THE STAR OF THE MAGI.

1. **THE** Magi call this star, "that of the king of the Jews;" and they do not enquire, *whether* he be born, but *where* he is born?

2. They say, that they, when resident in the East, saw this significant star. SCHEUZER thinks they also saw this star during the whole of their journey; but this does not appear clearly, from their words; indeed, it seems to be no more necessary that they should see it during the whole of their journey to Jerusalem, than during their abode in that city. He thinks, they saw it by day as well as by night, during their journey to Jerusalem: if so, that journey, perhaps, was not long.

This depends on the country intended, under the term *east*.—Did the Jews give this name to *all* regions *east* of Judea,—*east* of the Jordan? if they did, we need not seek very far for the residence of these Magi; nor did they consume many days in their journey.

Travellers who have lately penetrated into the regions east of Jordan are very rare; the only one known to us is M. Seetzen, who visited the countries of the Ammonites and Moabites, in 1806. He describes the ruins of several capital cities—as those of Robba [Rabbath Moab] and others, where Roman ruins of considerable magnificence, and Corinthian columns, are still standing. This proves the Roman dominion in those parts:—so that if the Magi came from thence, they were subjects

jects of the same power as Herod. He observes, "The town of Karrac—a Bishop's see—whose bishop lives at Jerusalem—commands a fine view of the Dead Sea and Jerusalem, which are perfectly distinguishable in clear weather." This country is East of Judea:—those who dwelt in the East, then, might see, across the Dead Sea, any luminous body hovering in the air over either Jerusalem, or Bethlehem:—both being situated on high ground.

3. The motion of this star. It is said to go before them from Jerusalem to Bethlehem, this being from north to south, it could be no planet or celestial star, such moving from east to west, neither could a celestial body have indicated a particular town or village, much less a house, by standing still over it. Its motion also was probably very slow. It was not much elevated above the earth. We read of meteors seen throughout a kingdom; and in 1719 was seen a flying fire, which was observed between Italy and Istria; and which might have been visible, perhaps, from Greece to England; yet this phenomenon was reckoned only 14 miles above the earth. However, at this height, it would have been utterly useless, in pointing out any specific object. The nearer to the earth any meteor is, the more distinctly is its progress seen, and the more decisively it may distinguish an object. We are not then to take the word *star* strictly for a celestial body, but for a meteor, not very high in the air:—we ourselves may see most evenings, in proper weather, falling stars, or lambent flames, or other meteors, which, in common language, are called stars, though very improperly. A meteor of a more stationary, tranquil kind, not rapid, not very high above the clouds, perhaps, hardly so high as the clouds usually float, may describe the star of the Magi. If any person wishes to estimate this height, let him compare a narrow, contracted halo, or white circle, seen around the moon, with another of considerable width; and he will soon perceive how much better adapted for marking out any place is the lower meteor than the higher. I merely select this, because it occurs frequently: some I have seen have been but a few hundred yards in height.

This meteor, then, appears to have been an over-ruled phenomenon, according with the laws of nature, not a new star, properly speaking: but more effectual to the purpose intended, than any star, properly celestial, could possibly be.

What other questions on this subject are usually started, rather refer to points of history, than to natural philosophy; and whatever it contains of miraculous, is of course, beyond our present enquiry.

CHAPTER III. VERSE 4.

JOHN THE BAPTIST.

IN considering the character of John the Baptist, we must, of necessity, make great allowances for the force of that language in which his manners are described. If we determine, at all events, to take Scripture expressions *literally*, we might prove that this holy person, during thirty years, "neither ate nor drank," Matth. xi. 8.; but we know that a life of the utmost abstemiousness *must* accept refection. To be properly understood, the phrase requires accommodation; so does that of Luke, "neither eating bread nor drinking wine;" meaning, not making full or hearty meals, not enjoying feasts or good cheer; but that John never indulged so far as to eat bread, is, I presume, no more intended there, than total abstinence is intended in the former text. But, in this passage we are told what he *did* eat, what part of his diet consisted in; that is to say, food of the wildest kinds, and requiring the least artificial preparation; such as the conveniences, (rather inconveniences,) of a desert afforded. Conformable to the nature of his food was that of his dress; which was simple and ordinary, not magnificent or luxurious: it was of "camel's hair," (τριχων,) not, perhaps, an undressed camel's skin, as some have supposed; for a skin is called *deras*, not *trichon*, Heb. xi. 37. Such is the usual, and perhaps correct representation of this passage. However, I doubt whether we are not to regard John as an Essene, whose dress was ordinary, but some part of it, the girdle, or some other, was hairy, according to the custom and appearance of the ancient prophets, 2 Kings i. 8. I am far from thinking John went naked, as painters usually depict him; but, would much rather think he was clad in the coarse mantle and homely garb of the wilderness-sect among the Jews, (the Essenes,) than in that insufficient manner which might be all a boor could procure, but which was unbecoming the son of a priest. The dress of a prophet best suited the character of a prophet; and a prophet, too, who was the precursor of Messiah, the Prince.

If his garb was homely and coarse, his fare was frugal and simple,—"*locusts*:" these have been fancied by interpreters into many different things:—cakes, fried in oil—tips of plants—husks—wild fruits—squills—crabs, &c.; but I see no reason for saying he restricted his diet to locusts only; he might be content with these; but are these to be had at all seasons of the year? How did he preserve them, dress them, &c.? By the same means as he may be supposed to have accomplished these purposes, he might obtain other food; pulse, herbs, grain, &c.; the customary diet of ascetics.

"Wild honey:"—honey is of two kinds; bee-honey, palm-honey. Bee-honey also divides into two kinds; that made by bees domesticated, which may be called cultivated honey; that made by bees in their natural state, which may be called wild honey. That wild bees make great quantities of wild honey in Judea, is unquestionable; 1 Sam. xiv. 25; Isaiah vii. 15; Prov. xxv. 16. I have but one objection to this, that honey seems to have been laid under a kind of exclusion, almost amounting to prohibition, by the Levitical law. Lev. ii. 11; xi. 20.

Palm-honey, or honey distilling from trees, or furnished by trees, was, also common in Judea; and this was no less used as food than the other. The epithet *wild* rather inclines me to this kind of honey; for that made by wild bees was less in a state of nature than that from trees. However, I think we must not take either word *exclusively*: I doubt not but John could regale on bee-honey, when he could get it; and this might be his dainty, perhaps his luxury.

After what we have seen on Lev. xi. there is no need to detain the reader by proofs, that *locusts* were a food permitted by the law; and that they are still used in the East. There is, however, a tree, which bears a large pod, not unlike a broad Windsor-bean: this pod I have seen, and have tasted the fruit within it, which, surely, is coarse enough. Many persons think this is the true *locust*; and the Germans call it *St. Johan's Brod*. But the difficulty of proving, by competent authorities, that this tree was *anciently* called *locust*, is very great; nevertheless, it has been strongly attempted by *Sir Norton Knatchbull*. Perhaps these pods are the *husks* of Luke xv. 16. on which the prodigal fed: but though they have a mawkish kind of sweetness in them, yet that does not qualify them as the honey here intended.

VERSE 7.

Ye generation of VIPERS: i. e. persons who conceal their hurtful qualities, as vipers conceal their fang-teeth, and the poison in them, till the unhappy subject whom they have seized, is absolutely, and fatally, struck by them. I take this to be the true import of the comparison, as it is founded in nature; therefore greatly to be preferred to any one more specious, but fabulous.

As to the expression, *generation, brood, sons, offspring*, of vipers, the usage of the Hebrew names of relation, implies a likeness, or correspondence in character, not a descent by blood, in very many places of scripture, where it is totally concealed in our version. Vide SON, CHILDREN, &c. in CALMET, SUPPLEMENT, &c. Compare also the article Cappadocia, in the Geographical Index to the Holy Bible: where is inserted an an-

cient epigram, describing the Cappadocians as a brood or *generation* of vipers. The simile is strongly in point to this exclamation of John Baptist.

CHAPTER IV. VERSE 5.

THEN the devil taketh him up... setteth him on a PINNACLE OF THE TEMPLE,—and saith to him, Cast thyself down.

Without pretending to convey an adequate idea of this subject, or meaning to attempt suggesting any conclusion on it, I shall take leave to think, that the temptations which are recorded as having assaulted our Lord, did not happen in instantaneously immediate succession; but at intervals; and that, very probably, these are only *selected*, as instances from among many. This leads to the supposition that there is no need for attributing to the devil any power of conveying our Lord's body *through the air*; or by any other *preternatural* manner bringing him to the holy city. The thought appears to me unworthy, if not profane; but, if we suppose that our Lord visited Jerusalem now, as he might have done at other times, we shall then find it advisable to enquire in what part of the temple he was placed on this occasion. To answer which, observe, that his station could not be on the roof of the temple, because *that* was full of *spikes*, and was not flat, but shelving; nor could it well be on the top of either wing, on each side of that sacred building:—to these considerations, we ought to add, the difficulty of getting there; and supposing that there were stairs which led to these roofs, and trap-doors for going on to them, still there would remain a difficulty, how our Lord or any other Jew, not a priest, could cross the court of the Levites and priests, and could obtain admission into such part of that holy house: which was jealously guarded by priests, &c. purposely stationed to prevent intrusion. Other impediments, not to say improprieties, might be mentioned, on such a supposition; for the devil would certainly never tempt our Lord to an act of *mere* desperation; which, from the extravagance of it, was an absolute throwing away of life; what no person in his senses would have attempted, &c. &c.

To understand this history, observe, that the word *ισπov*, rendered *temple*, signifies not only the holy house itself, but its courts, and the galleries round it; the whole structure: that the word *πτερυσιον*, signifies an appendage to a building, a wing. PARKHURST takes it for a portico, "the king's portico," which was built parallel to the south front of the temple. SCHEUZER reports three notions of this wing: 1. That of the *roof* of the holy house;

house; this he discards. 2. That of a *throne*, or exalted edifice, for the king to sit in at worship. "As it was raised greatly above the body of the building, it resembled the wing of a bird; [I do not see this resemblance:] it was called the *wing* of the temple. In Dan. ix. 7. the lxx. have translated *canaph*, by *pterugion*. There would not, in my opinion, be any inconvenience in taking this for the wing of the temple in our text." 3. A *tribune* of wood, erected every seven years in the court of the women, from whence the king read the law to the people. "This conjecture would be one of the most probable, if it could be proved that the time of the temptation of J. C. coincided with one of these festivals". This is a very plausible idea; as the temptation intended the manifestation of his powers to an assembled people—not in a solitary place; and the more numerous the assemblage, (as at a great feast) the more distinguished and *notorious* would an action so public eventually become.

The reader is now prepared to accept the word *wing*, unhappily rendered *pinnacle*, in a less *elevated* sense than before. I could almost wish to refer it to a certain *balcony*, portico, or projection, from one of the galleries which surrounded the temple court. I am aware that there seems to be an emphasis in the evangelist's language, "*the wing*,"—which refers apparently to *one* only; and I cannot think of a more likely place, than opposite to the great door of the temple, and commanding a view of the whole court. Possibly the History of the Death of *St. James Minor*, (vide CALMET,) will illustrate this subject:—"They made him go up into *one of the galleries of the temple* that he might be heard by the whole multitude—the Pharisees, &c. going up to where he was, *threw him down from thence*.—He did not die of his fall, but kneeling, prayed," &c. till he was stoned and slain. Whatever we may think of this history, it is, no doubt, near enough to fact to warrant the inference that there was a *projection* in one of the galleries around the temple, from whence a person could be well heard below; and that the *leaping down* from thence, to which the devil tempted Jesus, was not absolute *suicide*. We infer also, that there was ready ingress to it, and egress from it; and that no offence would be taken at a person's entering it. Perhaps further still, this might be a convenient place from whence the worship below might be beheld, and so much of the temple as a stranger might see *as a sight*; as strangers visit St. Paul's, or other churches, from mere curiosity, distinct from devotion. These ideas are so different from those which rise in the mind of an English reader, on the words "*pinnacle of the temple*," that they require consideration; but, if

admitted, they render the history much easier: they have readiness of approach, possibility of a plausible persuasion, the absence of desperation, the reason of the place being in the singular, and many minor facilities, which the intelligent reader will not fail to remark for himself. Add to this that there was a portion of the temple court which was not deemed *sacred*, but common.

CHAPTER V. VERSE 13.

YOU are the *SALT* of the earth: if the salt have lost its savour—literally, become foolish,—it is good for nothing, &c.

It is probable that our Lord may refer here to salt dug from the salt lakes, the *upper* crust of which, having been exposed to the sun, rain, and wind for a long time, loses its relish, and becomes merely a mass of *terra damnata*, as the chemists speak; a mere *caput mortuum*: appearing externally like salt, but possessing none of the properties of that mineral. Something of this may be gathered from Dr. SHAW's account of the mountain of salt: "*Jibbel Had-deffar* is an entire mountain of salt, situated near the eastern extremity of the lake of Marks. The salt is of a quite different quality and appearance from that of the *salinæ*, being as hard and solid as stone, and of a reddish or purple colour. Yet what is washed down from the precipices by the dews attaineth another colour, becoming as white as snow, and losing that share of bitterness which is in the parent rock-salt." p. 229. *Fol. Ed.*

CHAPTER VI. VERSE 19.

LAY not up treasures on earth, where *MOTH* and *RUST* corrupt.

"It seems that the two words in our text, *σὺς*, *ses*, and *βροσις*, *broxis*, signify two sorts of worms, or maggots, as appears by Isaiah i. 9.; where the lxx. and *Thiodotion* translate the Hebrew *osh*, by *ses*, but *Aquila*, by *broxis*; and *Baruch*, vi. 11. speaking of the idols of the Gentiles, says, "they cannot save themselves from rust and moths," *bromaton*, where the word *broma*, or *broxis*, denotes also a kind of insect. The Greek *ses* derives manifestly from the Hebrew *ses*, or *sas*, Isaiah li. 8. "The moth shall consume them like a garment." The Orientals have nearly preserved the name; the Arabs call *usset*, *uss*, a worm which erodes woollen cloths, and the book-worm also, *Meninski*, 3215. If any one supposes that the word *treasures* does not include vestments, books, &c. let him note *Esdras* ii. 69.; *Nehem.* vii. 70.; *Job* xxvii. 16. *et al.*" *Menander*, the Greek poet, speaking of destructive

destructive things, says *σντες*, *moths* "destroy our clothes;" also the apostle James expresses *moth-eaten*, by *setobrotos*; and the lxx. Job xiii. 28. express the Hebrew "eaten by *osh*," by *setobroton*.

VERSE 28.

The lily of the fields. I should not be surprized if this were the same flower as is designed by the bride in Canticles ii. 1. who compares herself to "a flower of the brook side;" not of a cultivated garden. But, the *white* lily, which is what we first think of, is a flower of the field in Persia; and some of its species may be field-flowers in Judea. Beside this, there is the *martagon*, *crown-imperial*, and other coloured lilies;—if the comparison be to the whiteness of Solomon's raiment, then, certainly, it never equalled the brilliant whiteness of a lily:—if it be to resplendence of colours, then the mixture, the relief, the *glow* of colours, in some kinds of lilies, exceeds whatever the manufacturers of stuffs for Solomon's wardrobe could compose.—May the tulips be thought of on this subject? "*The lily of the field*," was perhaps present, and pointed at, when our Divine Master suggested this simile: if so, it was certainly a *wild* lily that was intended: but we need not fear whether the *wild* lily will bear the strictest comparison with the most perfect productions of human art.

CHAPTER VII. VERSE 16.

YOU shall know them by their fruits: do men gather grapes from thorns, acanthon, or figs from thistles, tribolon?

For this *acanthus* and *tribulus*, vide on Gen. iii. 18. Hiller observes, (*Hier. P. i. p. 51.*) "It is neither the flowers, nor the leaves, neither size nor age, which constitute the goodness of a tree. The willow flourishes to no use; the fig-tree cursed by Christ, was commendable only for its leaves; the elm, though very high, bears fruit, which no beast uses as food. The oak, itself, when old yields few acorns." It is a great proof of the goodness of Providence that each kind of tree produces fruit proper to itself—otherwise both men and animals might sustain great detriment. This expression is stronger still, in the singular:—from thorns—how numerous soever, men do not gather a *single* grape: from thistles they do not gather a *single* fig.

CHAPTER VIII. VERSE 20.

THE FOXES have holes; and the BIRDS of the air have nests.

We have elsewhere supposed, that these *foxes* are JACKALLS: and these *birds* are birds of prey:—which strengthens the contrast in these verses. "The benevolent Jesus has no abiding residence;

though the *ravenous* jackalls have coverts, and the *devouring* birds have nests." The word *shelter* might be conveniently substituted for nests; *i. e.* a place wherein to be under shade, as great trees, &c.

CHAPTER X. VERSE 92.

ARE not two SPARROWS sold for one farthing? The *struthion* of this text is always understood to mean the *sparrow*. We have no inducement to change the version.

CHAPTER XIII.

IT is mentioned, incidentally, in the parable of the sower, as related by three of the evangelists, that "*Some seeds fell by the way side, and the fowls of the air came and devoured them*, though they were, as Mark tells us, "*trodden down*," by passengers. This circumstance has no difficulty in our conception of it, but it would strike an Eastern imagination more forcibly than our own: for so THEVENOT informs us, "On that road I observed a pretty pleasant thing, which is practised in *all that country*, as far as *Bender Abassi*. I saw several peasants, running about the corn fields, who raised loud shouts, and every now and then clacked their whips, with all their force; and all this to drive away the birds, *which devour all their corn*. When they see flocks of them coming from a neighbouring ground, that they may not light on theirs, they redouble their cries to make them go farther; and this they do every morning and evening. The truth is, there are so great a number of sparrows in Persia, that they destroy all things; and scare-crows are so far from frightening them, that they will perch upon them."

The latter part of this extract may remind us of an expression in the letter of Jeremiah, in the apocryphal prophet, *Baruch* vi. 70. who, reasoning that idols are not gods, says, "For as a scare-crow in a garden of cucumbers keepeth—*i. e.* preserveth nothing; so are their gods of wood, and laid over (*plated* as a Birmingham artist might say) with silver and gold." The comparison of deities to scare-crows is sufficiently debasing of itself; but to add uselessness to that idea, must needs be abundantly more striking to those who knew the boldness of the birds of their country; which disregard these objects of terror, and "perch" upon what was designed to deter them.

The thorn of this passage is the *acanthus*. See c. vii.

VERSE 25.

THE TARES AMONG THE CORN.

It is not very easy to decide, whether by the name *zizania*, the Saviour intends indifferently all plants which grow among grain, or some particular species. All that we are certain of from the

the circumstances of the parable is, that it is a plant which rises to the height of the corn. This agrees with the *lolium* of Dioscorides. The Talmud calls it, *zonim*; the Turks, *ziwan*; the Arabs, *ziiwan*. It seems that the *zizanian* has passed from the East into Greece. *Dioscorides*, *Aristotle*, *Theophrastus*, &c. give it the name of *aira*, which *Suidas* calls, "The corruption of grain." It not only deprives the grain of its nourishment, but its seed (which Virgil calls *infelix lolium*) mingled with the meal, occasions *inebriety*, vertigoes, and often a lethargic and mortal torpidity. *Theophrastus* says, it attacks the head; and Ovid says it hurts the eyes. FAST. i.

Et careant loliis oculos vitiantibus agri.

This *zizanian* is usually thought to be the *darnel* of our corn fields. *Lolium temulentum*, Lin. The same herb is called *zisanion* by the Spaniards.

The *ivraie* of the French answers this description; but is happily not known in Britain. Its name *ivraie* is allied to *ivresse*, drunkenness.

VERSE 31.

MUSTARD SEED.

A grain of mustard seed; the smallest of all seeds, yet riseth up, is greater than herbs, and becometh a tree. The mustard of our own country is very far from answering this description; but there is in the East a species to which, no doubt, it alludes; it is called by Linnæus, *sinapi Erucoïdes*. Its branches are real wood, as appears from a specimen in the collection of Sir JOSEPH BANKS. This tree may well afford shelter and shade to birds; but whether it may equal some mentioned in the Talmud of Jerusalem (*Tract. Peah. f. 20.*) I do not know. "There was in Sichi a mustard tree, which had three branches, one of which, being cut down, served to cover the hovel of a potter; and yielded three CABS of seed. The rabbi Simeon son of Chalaphthah, assures us, "that he had in his garden a shoot of the mustard tree, on which he clambered as if on a fig tree." Without insisting on the accuracy of this, we may gather from it, that we should not judge of Eastern vegetables by those which alone are known among ourselves.

CHAPTER XXII. VERSE 45.

THE kingdom of heaven is like a merchant, seeking goodly PEARLS. The *pearl* is a gem so well known among us, as the production of a certain kind of oyster, that we have no need to enlarge in describing it. But, we may submit some instances of the great value of goodly pearls; by way of shewing, what efforts to obtain them they might justify. *Ramusio*, (*Pereg. tom. I.*) mentions a pearl found in the Pearl Islands, or where the

fishery is carried on in the Gulf of Bahrein, toward Persia, which was the size of a nut, and sold for 1,200 ducats. *Tavernier* mentions another found, 1633, at *El Catiff* in the Gulf of Bassora, sold to the king of Persia for 32,000 tomans. *Nic Grimm* saw one at the Cape of Good Hope which weighed an ounce, but was imperfect. One is mentioned as sold for 1,000,000 ducats. *Eph. Ger. Dec. II. Ann. 3. Ob. 36.* This seems prodigious; and perhaps there is a cypher too much in the account.

CHAPTER XXIII. VERSE 23.

WOE unto you, hypocrites, for ye pay tythe of MINT, ANNISE, and CUMMIN—Luke xi. 42. mint and RUE, and all manner of herbs.

Little can be said on these plants: that they are translated with sufficient accuracy, is the general opinion. It may not be amiss to add, that they are not, perhaps, strictly speaking, *garden* herbs in the East, but though used as food, are rather wild than cultivated: hence the scrupulosity of paying their tithes is the more extravagant, nevertheless *rue* is admitted into the garden; and *cummin* is spoken of as cultivated by the husbandman, *Isaiah xxviii. 27.*

VERSE 24.

Blind guides who strain out a GNAT, but swallow a CAMEL.

In this passage there is an evident opposition between the *gnat*, which these professors of purity are said to *strain out*, and the *camel* which they are said to swallow. The word *konops* here used, signifies properly a small insect which breeds in wine becoming tart, or in vinegar itself: We read in *Aristotle, Hist. lib. v. cap. 19.* "The *wine-gnats* proceed from worms, which are bred in the lees;" and *lib. iv. cap. 8.* "The *wine-gnat* does not fly to that wine which is sweet, but to that which is acid." *Plutarch* says the same [but I think some insect which did visit sweet or potable wine, must be here intended.] *Anatolius*, (*Geop. lib. vi.*) advises to cleanse the wine-press thoroughly after having used it, lest the left liquor should breed insects. The ancient Greek interpreters render those words, *Amos vi. 6.* which we translate, *who drink wine in bowls*, by "who drink *strained* wine—but are not grieved for the affliction of Joseph:" this contradictory affectation of external purity, without corresponding internal sentiment, agrees well with the scope of our text. The Talmudists also mention *jabhkuschin*, or wine-gnats; and *Maimonides* writes, (*de Cib. Vetit. cap. ii. f. 22.*) "He who strains wine, vinegar, or strong liquor, and swallows the *jabhkuschin*, the insects, wine-gnats—which he has strained, is deserving of punishment." *Vallisneri*,

Vallisneri, (*Dialoghi*, p. 151.) describes these insects. Erasmus compares this proverbial manner of speaking respecting the swallowing of a camel, to that of the Greeks "taking a statue down the gullet."

CHAPTER XXVII. VERSE 29.

THE soldiers platted a crown of THORNS, and put it on the head of Jesus: and a REED in his right hand.

The words *acanthos*, thorn, and *calamus*, reed, are far too general to determine the specific kind thus employed by the soldiers; we should suppose they were articles which grew not far distant. Vide on Judges viii. 16.

The *calamus* was probably of the nature of a cane, and affected at least to answer the purposes of a scepter; or, perhaps, was a kind of walking-stick.

VERSE 34.

They gave him vinegar mingled with GALL—Mark xv. 23. mingled with MYRRH.

Vide Deut. xxix. 18.

VERSE 45.

From the sixth hour to the ninth hour, there was DARKNESS over all the land.

This verse divides into two parts: first, of the hours; which, compared with those of another evangelist, John, produce a *seeming* confusion. Many modes have been suggested of obviating this; some have supposed that John used the Roman hours; others, that he calculated from the preparation of the passover; in which case the times would stand pretty nearly according to the following arrangement:

Jesus seized at midnight: at this time the preparation for the passover began in the temple.

About the sixth hour after his seizure, (or after the beginning to prepare the passover,) Jesus is brought before Pilate: John xix. 14. *six o'clock in the morning*.

At the third hour of the day, reckoned after the Jewish manner, from sun-rise, Jesus is nailed to the cross, and the cross is erected: *nine o'clock in the morning*. Mark xv. 25.

At the sixth hour of the day darkness begins: at noon. Matth. xxvii. 45; Mark xv. 33; Luke xxiii. 44.

At the ninth hour of the day Jesus expires: *three o'clock in the afternoon*. Matth. xxvii. 46; Mark xv. 34.

Jesus is taken down from the cross, carried to Joseph's tomb, his body anointed, and spices flung over it, &c. from four o'clock in the afternoon to

six o'clock in the evening. This preparation for his interment was performed in a hasty and imperfect, incomplete manner.

The second part of this verse refers to the *darkness* over the land. What occasioned this *darkness*?

The nature of *eclipses* is so well known among us, that we have no need to explain how they are occasioned by the intervention of the moon, hiding the face of the sun; or, by the shadow of the earth falling on the moon. It is well known, also, that the Jewish feasts were regulated by the moon's course, and age; and that at this time a *natural* eclipse of the sun by the moon was impossible, the moon being now at full. What was the real (secondary) cause of this suspension of the solar light in Judea, we cannot easily determine.—Was it a cometary body passing so near the earth as to hide the face of the sun for a time?—Was it a body of clouds extremely dense?—Was it a foggy exhalation rising from the earth, and enveloping the atmosphere in gloom and obscurity? These, and many other conjectures might be offered, but they could only be conjectures after all. Some learned astronomers have calculated the situation of the heavens for the day of Christ's crucifixion; but this, could we ascertain it, would not solve the question.

It may be rationally enquired, whether the cause of this darkness was not in the earth, or in its atmosphere, much rather than in the sun, or occasioned by any celestial body? Is it quite certain, that the word *scotos*, used by three of the evangelists, signifies an *eclipse* of the sun? Might not such dense vapours, as our fogs sometimes are, (Vide on Exod. chap. x. 21.) cause an *obscurity* impenetrable by the solar light, or at least very little penetrable by it? Are we bound to suppose a *pitch* darkness? I think not: and therefore, upon the whole, venture to incline in opinion, that our earth, or its atmosphere, or both, furnished the principles of that *interposing medium*, which shadowed Jerusalem, at this time, by keeping off the rays of the sun from that city, and its neighbourhood.

VERSE 52.

The *resurrection of the dead persons* from their tombs, is among the most extraordinary attendants on the crucifixion: that tombs should be opened by an earthquake, is not extremely wonderful; whether those tombs were buildings above ground, in rocks above ground, or were graves below ground. If they were cut in rocks, then, only those stones which closed their entrances might be displaced, and the interior chambers would admit the light of day:—if they were small buildings, then their openings were of a different

ferent kind. Perhaps they were not all of the same kind; be that as it might, my wish is, to restrict these persons thus wonderfully revived, to such as had lately been interred. I see no use, nor any propriety, in reckoning among them the ancient patriarchs; says SCHEUZER, "*Abraham, Isaac, Jacob,*" forgetting that these were buried [in the cave of *Machpelah,*] far enough from Jerusalem; as, most probably, also, were "*Zachariah, Elizabeth, and John.*" As it is said that *they went into the holy city, and appeared unto many;* no doubt they were persons well known in that city, and to those whom they visited. They must, therefore, have been contemporaries; and this reduces their number greatly, since Jerusalem could not have furnished many recently dead. We know, that it is equal to the Divine Power to revive twenty as two, or an hundred as one single person: but we are not to judge by what Divine Power *can* do; that principle has occasioned many errors, under the weak application of human minds; we are to determine from the narration, the expressions used, and the proprieties connected with the subject. If I saw the least use in supposing the revival of all the patriarchs and prophets, from *Adam* to *Zachariah,* far be it from me to doubt the possibility of it: but how should these be *known* in the holy city? How should even David and Solomon themselves be *known*? and if not *known*, where is the use or the effect of their being raised, and of their visits in the city? Of what advantage to the then living inhabitants of Jerusalem could be the revivification of persons whose features had long perished from remembrance? Did they announce themselves, who could believe them?—who could ascertain them? And conceal themselves they could not, they did not; "*they appeared, unto many:*"—then certainly they were acquainted with *many*, and many with them.

The following is a very important discovery:

"We had been to examine the hill which now bears the name of Sion; it is situated upon the south side of Jerusalem. If this be indeed mount Sion, the prophecy (Mich. iii. 12.) concerning it, that the plough should pass over it, has been fulfilled to the letter; for such labours were actually going on when we arrived. We descended into a dingle or trench, called Tophet, or Gehinnon, by Sandys. As we reached the bottom of this narrow dale, sloping towards the valley of Jehosaphat, we observed upon this side of the opposite mountain, a number of excavations in the rock, similar to those described among the ruins of Telmessus, in the Gulf of Glaucus; and answering to the account published by Shaw of the *Cryptæ* of Laodicea, Jebilee and Tortosa. We rode towards them; their situation being very little ele-

vated above the bottom of the dingle on its southern side. When we arrived, we instantly recognised the sort of sepulchres which had so much interested us in Asia Minor, exhibiting a series of subterraneous chambers hewn with marvellous art—

".....Upon all the sepulchres at the base of this mount....there are inscriptions, in Hebrew and in Greek. The Hebrew inscriptions are the most effaced: of these it is difficult to make any tolerable copy. Besides the injuries they have sustained by time, they have been covered by some carbonaceous substance, either bituminous or fumid, which rendered the task of transcribing them yet more arduous. The Greek inscriptions are brief and legible, consisting of immense letters deeply carved in the face of the rock, either over the door, or by the side, of the sepulchres.

"Upon the first we observed these characters.

+ T H C A T I A C

C I W N

OF . THE . HOLY

SION

Having entered by the door of this sepulchre, we found a spacious chamber cut in the rock, connected with a series of other subterranean apartments, one leading into another, and containing an extensive range of receptacles for the dead.

"Continuing our researches along this dingle, as it inclines towards the east, before its junction with the larger valley of Jehosaphat, we came to sepulchres....similar to those described.....near the place commonly shewn as *Aceldama*, or the *Field of Blood*.

"None of these inscriptions are now in a state to be interpreted.....In the second, the mixture of letters usually called Etruscan and properly Phœnician, with the characters of the Greek alphabet, added to the imperfect state of the inscription, seem to render illustration hopeless.

"In some of these sepulchres were ancient paintings, executed after the manner of those found upon the walls of Herculaneum and Pompeii; except that the figures represented were those of the Apostles, the Virgin, &c. with circular lines, as symbols of glory, around their heads. These paintings appeared upon the sides and upon the roof of each sepulchral chamber, preserving a wonderful freshness of colour, although much injured by Arabs and Turks." *Dr. Clarke's Travels in Syria, &c. Vol. II.*

The probability is that *Zion*, should be understood by the "*Holy City*," rather than *Jerusalem*; and that these revived bodies came out of the tombs on the side of the hill of *Zion*.

MARK

M A R K.

CHAPTER VII. VERSE 22.

FROM within, out of the heart, proceed evil thoughts....an EVIL EYE.

It is most probable that our Lord here refers to a grudging, envious, malignant, disposition of mind, which in the countenance shews itself by a certain perversion of the organs of vision, a kind of askance look; which is much more easily imagined or noticed than described:—gloomy jealousy, unhallowed repining at another's welfare, are most probably what our Lord here censures. But there is in the East a very strong persuasion that an *evil eye* has power to do great mischief to the person it dislikes; and many are the precautions taken against its effects, as quoted below. It must certainly be acknowledged that when "Saul *evil-eyed* David from that day forward," there wanted but little to instigate his aversion into action, to chace his faithful servant, like "a partridge on the mountains:" no doubt the observation of a similar progress in evil in many other instances, contributed to establish the opinion of an *evil eye's* influence.

"They have a great notion of the magic art; have books about it, and think there is much virtue in talismans and charms, but particularly are strongly possessed with an opinion of the *evil eye*; and when a child is commended, except you give

it some blessing, if they are not very well assured of your good will, they use charms against the *evil eye*; and particularly when they think ill success attends them on account of an *evil eye*, they throw salt into the fire." POCOCKE'S *Travels in Egypt*, vol. i. p. 181.

CHAPTER XIV. VERSE 51.

"**IT** is almost a general custom among the Arabs and Mahometans, natives of this country, to wear a large blanket, either white or brown; and in summer a blue and white cotton sheet, which the Christians constantly use in the country; putting one corner before, over the left shoulder, they bring it behind, and under the right arm, and so over their bodies, throwing it behind over the left shoulder, and so the right is left bare for action. When it is hot, and they are on horseback, they let it fall down on the saddle round them; and about *Faiume*, I particularly observed, that the young people especially, and the poorer sort, had nothing on but this blanket. It is probable the young man was clothed in this manner who followed our Saviour when he was taken, *having a linen cloth cast about his naked body; and when the young men seized him, he left the linen cloth, and fled from them naked.*—Joseph's garment might also be of this kind, Gen. xxxvii. 3." POCOCKE'S *Travels in Egypt*, vol. i. p. 190.

L U K E.

CHAPTER XI. VERSE II.

IF a child ask a fish, will his father give him a serpent? or, if he ask an egg, will he give him a scorpion? Many fishes are as long in shape as some serpents are; but *eels* are probably the fish more particularly alluded to, as they might easily be substituted for serpents; and we see, by the figure and size of some kinds of scorpions, that they are oblong, and thick, though not white, like an egg: but the comparison probably intends a child incapable of discerning one from the other by their proportions; a *young* child, desirous, but not judicious. [*Vide* on Isaiah xi. 14. plate.]

CHAPTER XV. VERSE 16.

HE desired to fill his belly with the HUSKS which the swine did eat.

St. Luke calls these *husks*—*keratia*: this word is equivocal, and denotes those external coverings which include the seeds, &c. of vegetables, perhaps too, the bran. Beside this, it signifies plants, and even a tree is called *keration* by *Dioscorides*, lib. i. cap. 159. because its fruit resembles little *orns*. *Galien* and *Eginetus* call it *keratomia*; the modern Greeks, *xylokerata*. This tree loves

warm situations: it rises very high, on a thick trunk, and spreads strong, large, and solid branches. Its leaves are wing-shaped, somewhat roundish, three inches broad or more, and rather longer. Its flowers are milk white; the fruit is in pods, longer, and thicker than a finger, somewhat crooked and flat; sweet and edible.

This tree is common in the Calabrias, Sicily, Egypt, and Palestine, and near Jerusalem. It has been called *St. John's bread*, from a supposition that the fore-runner of the Messiah made this fruit his food. *Vide* on Matthew iii. 4.

Dioscorides characterises this fruit as incommoding the stomach, and relaxing the belly, while fresh; but when dried, as strengthening the stomach and bowels. *Pliny*, lib. xxiii. cap. 8, says the same. The Egyptians, according to *Alpinus*, extract from these pods a very sweet honey, which the Arabs use for a seasoning instead of sugar. This honey also is employed, instead of bee-honey, for clysters; and some even give it as food, to relax the bowels. It is probable, therefore, that the prodigal ate this fruit, in a time of scarcity, as we might do acorns, &c. in England. The *Syriac* reads *charub*; the Arabic *charuub*. It is known among us by the name of the *carob-tree*.

JOHN

J O H N.

CHAPTER XIX. VERSE 34.

BUT one of the soldiers, with a spear, pierced his side, and forthwith came there out BLOOD AND WATER.

This is an interesting circumstance: it is testified by the evangelist in solemn terms; "*and he who saw it bare record; (and his record is true: and he knoweth that he saith true) that ye might believe.*" Every word here is important; "and he, seeing it, DID testify it;" *i. e.* immediately, either at the very time, he remarked it to some other, for observation; or, directly after the circumstance, while it was yet fresh in his mind; and now he repeats this declaration: averring his own knowledge and conviction, for your conviction also,—that ye may believe: believe what?—the real death of the person so pierced.

This wound was made in *the side* of Jesus; whether the *right* side or the *left* side is not mentioned; yet, according to which side it was, depends what internal (viscera) parts were wounded. The instrument also deserves notice; it was a short lance, not a horseman's spear; but one carried by a class of foot-soldiers, who were lightly armed. The word used is *longche*, (λογχη) a name given, says *Pollux*, to the iron head of a lance: those pretorian soldiers who carried these lances were called *Longchophoroi*: (by the bye, here we see the root of the name, *Longinus*, by which the soldier who pierced our Lord is called in antient martyrologies.)

These circumstances confirm the notion, that the cross on which Christ suffered was but little elevated. It is every way credible that his feet were not above twenty or thirty inches from the ground; so that, a soldier, in piercing his side, needed neither a *long* lance, nor any great action in raising his arm; so that, what Jesus said from the cross to his mother and to John, was not spoken very loud, but in an ordinary tone of voice: yet, as what he said was certainly heard by the soldiers, he might not choose to call his *mother* by that name, lest he should bring her into trouble, as participating in his treason; neither does he call *John* by his name, but says to one, "Behold thy son;" to the other, "Behold thy mother;" and both understood his meaning, though too obscurely expressed to be laid hold of by the by-standers.

Observe the remarkable *escape* from *falsification*, so to term it, of the Scripture expression, "*a*

bone of him shall not be broken;" for the course of this lance to reach the heart of Jesus must needs have passed very close to some or other of the ribs, if not indeed between certain of them; and had we seen the action, we should, no doubt, have supposed that some of them *must* have been broken; but Providence ordered otherwise; our Lord was at such a height above the person who struck him, that, probably, the stroke was under the *sternum*, or the false ribs, so as just to escape them; while, being struck with force, it reached his heart. I think there is no doubt that it reached his heart, because the *blood and water* was furnished from thence: the *water* from the *pericardium*, or bag which surrounds the heart, and which always contains a quantity of that fluid; the *blood* from the heart itself, that grand reservoir of the circulating life of man. Had water only issued, it might have been thought that the point of the lance had stopped short of the heart itself; but both water and blood were seen to follow the lance, perhaps to run down it, as an indisputable token that it was the heart which received this wound; since no other part of the body, internal or external, could, at that moment, have furnished these two fluids, in a state of separation. It was this state of separation which rendered them so noticeable to the apostle John: this he says *he saw*; he was within hearing distance, he was also within seeing distance; and we have no reason to discredit his testimony, unless we mean to deny the real death of Jesus; which was denied by some in the early ages; and to oppose that sentiment, John, here, in the most direct terms, asserts his unequivocal and perfect knowledge of this *decisive* fact.

CHAPTER XIX. VERSE 39.

NICODEMUS brought a mixture of MYRRH and ALOES, about an hundred pound weight.

These ingredients, *myrrh* and *aloes*, are, no doubt, the same as we have often already mentioned in the course of these remarks. The quantity they brought has been exclaimed against by certain Jews, as being enough for 50 bodies: I think this may be doubted; and that *several* mixed preparations, such as were used for embalmment are included under the terms. Whether we might wish to read *dekaton* for *ekaton*, 10 lbs. for 100 lbs. is mere conjecture.

ACTS OF THE APOSTLES.

CHAPTER VII. VERSES 33.

PUT off thy shoes from off thy feet, for the place where thou standest is holy ground.

Customs of countries, and modes of shewing respect differ greatly: though the intent be the same, yet the action varies. Among ourselves, uncovering the head is a token of respect; in the East, uncovering the feet answers the same purpose: as we should think it strange to be required to take off our shoes, so would an oriental to be required to take off his turban. Does this simple subject stand as an instance, that circumstances of divine worship may lawfully differ in different countries; and that mutual allowances and forbearances are indispensable among professors of the same religion?

We are accustomed to consider as somewhat of a hardship, the direction to priests serving the altar, that they should be *bare-footed*: and *Josephus* says, that some of them contracted disorders, lameness, &c. in their feet and legs. The *Talmud* tells us, too, that there was in the temple a heated marble flooring, whereon the bare-footed priests might stand, to recover the warmth of their feet. I am inclined, however, to doubt these accounts, as I think persons in the habit of going without shoes could very well walk on marble itself, without injury. This is done all the year round in the streets of Edinburgh; and if so far north, why not in Judea, a much warmer climate? It is still customary in the East; and the same kind of respect is paid to the presence, and to the dwelling of a superior, as was practised anciently. I say the *dwelling*, whether the party be at home or not.

"The poor spread the floor with straw mats, and the rich with fine carpets. No person even enters a room, without having first put off his shoes. A Frenchman boasts of having 'maintained the honour of his nation,' by wearing his shoes in the Governor of Mecca's hall of audience. It is just such another boast, as if an Arabian envoy should vaunt of trampling on the chairs of an European lord," NIEBUHR, vol. ii. p. 221.

"Some Greeks had hinted to us, that the Musulmans thought Christians unworthy of making this voyage in company with the pilgrims who were journeying to the holy city: and upon this account we should not go aboard *with shoes upon our feet*. But to be obliged to walk without shoes upon the deck was not an humiliating distinction, confined to Christians: it was a restraint to which all on board was subjected. *Nobody in those vessels but must walk upon deck without shoes.*" NIEBUHR, vol. i. p. 213.

"Many of them, however, walk with bare feet

upon the scorching sand, which renders their skin at length insensible." *Ibid.*

It should seem, by this remark, and it is confirmed by many other writers, that it is not the *cold*, or *chill* of the places trod on which is most feared in these countries, but the heat; accordingly, those Europeans who have lately visited Egypt, mention the *heat*, the *burning of the sands*, as acting through the strongest soles of their boots, in the most distressing manner: the marble pavements of the temples in Egypt being heated to a degree of which we can have no conception.

This accounts for the choice of the shade of trees, as places of devotion; the *coolness* was felt by the feet, no less than by the rest of the person.

CHAPTER IX. VERSE 5.

It is hard for thee to kick against the PRICKS.

There are two questions which arise respecting these *pricks*; *first*, whether they mean *spurs*, intended to drive forward a horse, and used by the rider for that purpose? or, whether they mean *goads*, used to drive forward the oxen, drawing a plough. The original word is *kentra*.

I shall submit an extract on the first notion, that of a *spur*. It has been said, that the ancients did not use spurs; MONTFAUCON replies:

"But the ancients had spurs; Cicero uses the word *calcar*, to signify spurs. Nay, he uses the term in a metaphorical sense, too; as 'such a person wants a bridle, such another person wants a spur,' to intimate that one is too slow, the other too quick; which shews that the use of spurs, (according to the common meaning of the word) was frequent in those times. *Virgil* describes the spur by the phrase an '*iron heel*,' (*Æneid*, lib. ii. 714.)

Quadrupedemque citum ferrata calce fatigat.

And *Silius Italicus*, (lib. vii. 696.)

*Ferrata calce atque effusa largus habent
Cunctantem impellebat equum.*

And yet, though we have many monuments of horsemen, not one of them has the least trace or mark that they wore a spur. I can easily imagine these spurs were only small *pricks* of iron, fastened to a little iron plate fixed in the shoe, at the heel; for I have seen such used by our country people: such a small iron pin, or prick, might be omitted in sculpture. The Greeks called the spur *κεντρον*; whence *ποτὶ κεντρον δε τοι λακίζειμεν τελεθει ὀλισθηρος δimos*; *the way is dangerous when you kick against the pricks*: which phrase is also used in the Acts of the Apostles:—It is hard to kick against the pricks," says our translation.

It is evidently this writer's opinion, that the *spur* is the subject intended by the word *kentron*; and

and what is remarkable, he has quoted one of those passages which are usually brought in favour of a *goad*; as may be seen in PARKHURST, from whom the following is partly extracted.

To kick against the goads, or pricks, is a proverbial expression, taken from unruly bees, and applied to those who, by impotent rage, hurt themselves. This proverb is used by Greek and Roman writers. *Æschylus*, in *Agamemnon*, v. 1620.

Kick not against the pricks, lest thou be hurt.

And *Euripides*, in *Bacch.* ver. 793.

I would with offerings supplicate the god,
Rather than madly kick against the pricks.

And *Pindar*, (in the passage quoted by MONTFAUCON above,) expresses the same sentiment.

How mad it is to kick against the pricks! says *Terence*, (*Phormio*, Act i. Scene 2.) using the word *calces*. Bochart observes, that Moses had used the same simile, Deut. xxxii. 15. saying, "Jeshurun had waxed fat, and kicked."

The reader will now judge between the probabilities that a *spur*, for a steed, or a *goad*, for a beeve, is intended. The meaning of the passage is clear enough either way.

VERSE 18.

And immediately there fell from the eyes of Saul, as it had been SCALES.

I have always thought those *scales* which fell from the eyes of Paul, were the *external coat* of the eye, blasted, as it were, by the splendour of that light, which they had been unable to sustain. I would just remark here, that this is one of those *associates* with a miracle, which, though they come in the last place of the history, are yet of the first importance; because they are so many securities against delusion. No ordinary power could have dislocated the thigh of Jacob; Jacob, therefore, had a suffering conviction that no delusion had deceived him, in what had previously passed. No ordinary power could command fire out of a rock, by merely striking it with the end of a staff; Manoh, therefore, had ample conviction that no power merely human, or capable of deceiving him, had been conversing with him. No effect of fancy could deprive Zechariah of voice and hearing, while it invigorated other parts of his person. And now, when Saul, after having felt his blindness, after being fully aware of that fact, and thoroughly convinced of it,—when he, being restored to sight, saw the *scales* which had fallen from his eyes, he must be more and more convinced that it was no *phenomenon* of nature which had struck him. Lightning might, no doubt, have blinded him; but could he have recovered his sight in three days, had he been so blinded? Certainly not. Would the outer coat of the eye have *shelled off* after such a stroke? Certainly not. Would the remaining coats of the eye have been fit for their

uses in vision? Certainly not. Could other persons have been convinced of the story told of a great light seen in the way, in any better manner, than by such evident memorials of a most extraordinary visitation, and a recovery beyond all credibility, if referred to natural events only? We have, in Scripture, histories of persons blind for a time, but no such accompanying marks of recovered sight; and when disease blinds some patients for a time, the tokens of restoration are not these *scales*, not the indurated covering of the *cornea*, nor any *external coating* from it.

CHAPTER XVI. VERSES 13. 16.

AND on the Sabbath we went out of the city, by a river side, WHERE PRAYER was wont to be made.—And, as we went to PRAYER. . . .

I believe it is universally agreed, that the word *proseucha* used here, and Luke vi. 13. signifies, not the *act* of prayer, but the *place* of prayer: an edifice, or enclosure at least, adapted to the purpose of prayer to God. The following extract from MONTFAUCON may confirm this opinion.

"The inscription is *Dis Manibus. Publico Corfido Signino Pomario de aggere A PROSEUCHA. Quintus Salustius Hermes amico bene merenti, et numerum ollarum decem.*"—"To the Gods of the Manes, and to Publius Corfidius Signinus, Fruiterer on the causey OF THE ORATORY, Quintus Salustius Hermes, hath made this Monument for his deserving Friend, and added ten cinerary urns." *Pomario de aggere a Proseucha*, I construe thus, "Fruiterer on the causey of the Oratory:" one who took care of an orchard or garden, by the causey; or who sold fruit there.

"*Proseucha* means the same as *προσευχή*, that is, *prayer*; and sometimes signifies the *place where they made their prayers*, or an *oratory*, as Eusebius, (*Hist. Eccl.* lib. ii. p. 43.) and Epiphanius, (*Hær.* 20.) use the word, where he says, "The Massalians had large places for *oratories*, which they called *προσευχας*, *proseuchas*." I do not know whether we meet this word *proseuchas* in Latin, used in this sense any where else. It certainly signifies the same as *sacellum*, *ædicula*, or *sacrarium*, places where they used to say their prayers. There are reckoned up at Rome above a thousand temples or chapels, or oratories, where they used to go to pray to the gods; and as there was certainly a great number of temples not mentioned by writers, there must have been a great many more *proseuchas*. So superstitious a people made *oratories*, or little temples, upon the least occasion."

If, then, it was customary to construct *oratories* on occasions of no great magnitude, there need be no question, whether the Jews also did not construct such for themselves; and they would wish their *oratory* to be at some distance from those
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of other people. *Josephus* cites a decree of the Halicarnasseans, (*Antiq. lib. xiv. cap. 10.*) which gives the Jews liberty "to build oratories, *proseuchas*, by the sea-side, ACCORDING TO THE CUSTOM OF THEIR NATION." The ancient Syriac version, accordingly, renders this passage *an house of prayer*. And we may remark, though these *proseuchas* were not confined to a station by the sea-side, or by running water, yet that the *proseucha* in Luke, being on a mountain, was separated, by its distance, from the probability of pollution by its neighbours; and therefore coincides with these ideas. Vide CALMET *Dict.*

These principles would subject this passage to the following corrections:—"We went to a house of prayer—and as we went to the house of prayer"

CHAPTER XIX. VERSE 35.

THE great goddess *Diana*—the image which FELL DOWN FROM JUPITER. We have several accounts of statues, whose worshippers claimed for them the honour of having fallen down from heaven. And very lately, the possibility of a nearer approach to matter of fact, and to rationality in this expression, has been shewn by a learned and curious history of stones, said to have fallen from the clouds: such have been found in various parts of the world; and, what is remarkable, they agree in character and composition. Now, if one of these stones was carved into an idol, it might approach near to a correspondence with the phrase in the text. Unluckily, however, for this *salvo*, most of the statues said to have fallen from heaven are of wood, not of stone.

At Athens the statue of *Minerva POLIAS*, (protectress of the city) was of wood. Says the Scholiast on Demosthenes, "There are three statues of *Minerva* in the Acropolis, (at Athens): one of them placed there from the beginning, is of olive-tree; this is called *MINERVA POLIAS*." It was supposed to have fallen from heaven.

Pausanias gives the following account of it:—"The most holy of all the statues is that of *Minerva*, which, by the common consent of all the townships, before they assembled themselves into one city, was dedicated in the place which is now called the Tower, but was then denominated the city, (*Polis*). It is reported that this statue fell from heaven; but whether this was the fact or not, I shall not now attempt to prove."

By this history, it should seem that this statue was dedicated at the origin of the city; for which reason it was called *polias*, "the city goddess." It appears also to have escaped the fury of the flames, when Xerxes burnt Athens; whence its sanctity, no doubt, was considered as very great,

and utterly indisputable: for so *Pausanias* mentions other ancient statues of *Minerva*, "which remain indeed entire, but are discoloured with smoke, and cannot bear a blow; for the flames reached these, when Xerxes seized on the city."

Query, Were the original wooden deities the first imported images? Were they the work of princes, &c. long since deified? or, were they what the original settlers brought with them into the country? so that their origin being very remote, they, like all other extremely ancient things, were referred to the deities. The memory of their origin was lost—*ergo*, they, being saved, were the works of the gods; so that as the original natives were esteemed by later ages to be *Aucto thones*, born of the earth, so these images were in like manner venerated as if they had been born of heaven. This seems to be as plausible a construction as the phrase will bear, and is supported by many considerations coincident with deep antiquity; but see another mode of accounting for its use by this person, FRAGMENT, cxxvii. p. 42—45.

The reader will perceive, that *Diana* of Ephesus was not the only idol whose character was endangered, if the opinions propagated by Paul, prevailed; and moreover, that it was not for want of other, and severer subjects, that this apostle, when at Athens, selected the altar to the unknown God. I venture to say, we should discover more and greater prudence, propriety, and care to avoid offence, in the conduct of the apostle at Athens, notwithstanding his zeal, or rather in union with it, were we better acquainted with the actual circumstances of that city, and of himself, at that period.

The following is an article from India.

The *ukhbars* of the middle of July, 1812. contain an account of the descent of two large masses of stone in the neighbourhood of Lahore, accompanied by a series of explosions resembling the discharge of a cannon;—a phenomenon, which, had excited consternation through the country.

[The *ukhbars* are newspapers, relating events of the day; circulated among the natives of India;—or rather the Mahometans there (being in Persian).]

Captain M—— is in possession of a great curiosity, viz. a stone precipitated from a thunder cloud, near the village of Kokurrgam, the 6th August, 1812. It weighs I should think four pounds at least, is very heavy for its size, being greatly impregnated with iron, and coated with a thin black crust, as if gunpowder had exploded around it; the thunder clap was heard by many in our lines, like a rustling fire of musquetry for about a minute, and on intelligence of the phenomenon reaching the camp, one of M——'s guides was sent out to inquire and get the stone, if possible. This he tells us was effected with some difficulty,

as the Pattell conceiving the stone of heavenly fabrication, had determined to say his prayers to it, with due regularity.—The ground where it fell, was an open space, quite clear of the village, and by the rapidity of its descent, it tore up, and was buried a foot deep in the earth.”

The terms in which the intention of the worshipper is expressed, are evidently loose and not intended to be taken too strictly, yet they decidedly imply that this stone of “heavenly fabrication” was supposed to have been prepared by some celestial deity, and from him sent down to earth; as his characteristic representative, or *locum tenens*.

The Recorder of Ephesus speaks of the Great Goddess Diana as *Diopetous*: which our translation renders “the image that fell down from Jupiter.” The word *image* is inserted, and there is nothing in the original which determines that it was an *image*. . . . But if the object of worship among the Ephesians was really a stone which had fallen from the atmosphere, like this at Kurrigam, then it might without any violence done to language be denominated “Jove-descended;” and the Ephesians would have acted in worshipping it, under the same persuasion as the Hindoo Pattell. That a stone might fall in those ages, as in the present, requires no proof;—that the evidences of its fall, also, might be incontrovertible, cannot be denied,—that however uncouth its form, or unpleasing its aspect, it might pass for “heavenly fabrication,” must be admitted. And if that stone also was “very heavy, and coated with a thin black crust,” it may afford a reason why the statues of Diana of Ephesus are black,—and some of black stone, distinct from allusion to her office in the character of Luna, as regent of night: shewing dark phases, &c. &c. *Literary Panorama*, Sept. 1813.

ROMANS.

CHAPTER III. VERSE 13.

THE poison of ASPS is under their lips.

This is a quotation from Psalm cxi. 4. where the Hebrew word answering to the *aspidon* of this passage is *ocabush*: we have nothing to add to what we have hinted on the Psalm, to which we refer the reader.

CHAPTER IX. VERSE 17.

IF some of the branches be broken off, and thou, being a wild olive-tree, wert grafted among them.

The art of grafting is so common among us, that there is no need to be particular in explaining it; yet, on a passage so remarkable as the present, we cannot altogether pass it by unnoticed. It consists in the introduction of a young shoot, twig, or branch, of a particular tree, on to the stem, or branch, of another tree, allied to the former in nature, and to a certain degree, in properties. This

CHAPTER XXVIII. VERSE 5.

THERE came a VIPER out of the heat, and fastened on the hand of Paul.

We have in our Introduction to the New Testament observed, that little distinction of creatures is found in it. In reference to the serpent-tribe, for instance, we have the words *dragon*, which is a great serpent; *ophis*, which is a serpent, generally; and *echidna*, which is a viper, but of what species we are not informed. Nor is this all, for unluckily, so far as natural history is concerned, the inhabitants of Malta tell us that St Paul banished all snakes and serpents from the island; so that we must ever despair of identifying the kind, by means of its progeny. As scripture is silent on that miracle, it may be allowed a naturalist to wish that the species had still been preserved on the island, in order that we might have shewn its deadly properties; but as the inhabitants have otherwise determined, we must submit.

Besides the words for serpents mentioned above, we have *asp*, or *aspic*, Rom. iii. 13.

There is in the Greek *Anthologia*, an epigram of Statyllius Flaccus, on the fate of a man who had escaped from the billows of the sea, and sleeping on the sands of Lybia, was fatally bit by a viper. The poet says, “It was hard to have struggled against the waves, and to have come safe to shore, to meet there the death which he had escaped from the sea.” The Maltese seem to have reasoned in a manner not unlike this, when they expected to have seen an instance of the divine judgment on Paul, though escaped from the waves.

That serpents conceal themselves in *faggots*, and among twigs and underwood, is well known.

is one of the most skilful operations of gardening; and it requires judgment, that the qualities of the new connection should improve and amend the flavour of the fruit expected, rather than injure it, which an injudicious assortment would undoubtedly occasion.

The simile of the apostle has these particularities in it:—1. That a shoot of *wild* olive is grafted into a cultivated tree, which is, as he observes, contrary to nature, and he might have added, contrary to art: since art would not have chosen a *wild* olive for the graft. 2. That some of the natural branches of this tree were displaced, to make room for these grafts; and that there is a possibility, perhaps we should add an expectation, that these may be grafted again, on their own tree; a procedure which may be very expressive as an allegory, but which is not according to the practice of a skilful gardener; nor to the state of branches separated from their parent tree.

I. CORINTHIANS.

I. CORINTHIANS.

CHAPTER XI. VERSE 10.

A WOMAN ought to have POWER on her head, because of the ANGELS.

It may be seen, FRAGMENT, No. cxlii. that the wearing of a *veil*, by a married woman, as a token of her being *under power*, was the sense proposed, as being intended in this passage. The *veil* of married women was called in Hebrew, *radid—dependency*, i. e. a sign of dependency; and this the apostle translates, *exousian—power*, i. e. a sign of being under power: this may safely be taken as the proper meaning of the passage: yet another thought strikes me, whether a woman *before* marriage was not so secluded, as to have *no power at all*;—not over others, for the servants of the family were those of her parents, not of herself;—not over herself, for this, by the laws of Greece, was forbid from being so much as supposed: she was under the protection of her father, her brother, or nearest kinsman. For this reason, possibly, the married veil was called *power*, rather than “a token of being under power,” i. e. associating rather the *superior* import of the word, than the *inferior*, with this part of a matron’s dress. This, I say, *may* be taken as an occasion of the name; but it does not alter the application of this part of dress: for certainly it was this *veil*, which, from its form, or, &c. denoted the wearer to be—no young girl, taking on her to teach others,—but a sedate, orderly matron, accustomed to regulate her household, to give them directions, and to be obeyed. As this token of her station, the apostle says, *must* be worn, it may not be amiss to observe the importance attached to this part of dress in the East. It was not less anciently.

“All the women of Persia are pleasantly appalled: when they are abroad in the streets, all, both rich and poor, are *covered with a great veil*, or sheet of very fine white cloth, of which one half, like a forehead-cloth, comes down to the eyes, and going over the head, reaches down to the heels, and the other half muffles up their face below the eyes, and being fastened with a pin to the left side of the head, falls down to their very shoes, even covering their hands, with which they hold that cloth by the two sides; so that, except the eyes, they are covered all over with it. Within doors they have their face and breasts uncovered; but the Armenian women in their houses have always one half of their face covered with a cloth that goes athwart their nose, and hangs over their chin and breasts, except the *maids of that nation, who, within doors, cover only the chin, until they be married*. It is not to be thought strange that the women are so hid; for all over Persia, as well as in Turkey, they observe the custom of not shewing themselves to men, and that so strictly, that when a man marries, he sees not his bride

until the wedding day at night, and the Roman Catholics observe the same custom. Whilst I was at Schiras, the Carmelites there married a Georgian widow to a Roman Catholic, a native of Schiras, nephew to the Signora *Maani Giverida*, the first wife of signor *Pietro della Valle*: the truth is, I was a little surprised to see the woman present herself before the father that married her, all veiled and covered over; however, she was married in this manner. THEVENOT, Part II. p. 93.

“This situation of the women among the Orientals occasions a great contrast between their manners and ours. Such is their delicacy on this head, that they *never speak of them*; and it would be esteemed highly indecent to make any inquiries of the men respecting the women of their family.” VOLNEY’S *Travels*, vol. ii. p. 483.

“The *veil worn by their women* is of itself a preservative against those desires which are the occasion of so many evils in society. No man knows the face of any other woman than his wife, his mother, his sister, and sister-in-law. Every one lives in the bosom of his own family, and goes little abroad. The women, those even of the Shaiks, make the bread, roast the coffee, wash the linen, cook the victuals, and perform all domestic offices.” VOLNEY.

We learn from the *first* of these extracts, that the Armenian *married* women wear somewhat of a veil, even at home, which the *unmarried* women of that nation do not. This veil, then, by whatever name it be called, is a token that the wearer is married—as our lawyers say *femme couverte*. The second extract, if referred to the history, Gen. xvii. 19. may render the inquiry made respecting Sarah, the wife of Abraham, more striking than we usually esteem it.—What could Abraham and Sarah think of such a breach of customary politeness and discretion. Either the speaker was unusually rude, or unusually interesting; and this, no doubt, was the opinion of Sarah, who, hearing her name mentioned, was prompted to listen to what was about to follow. Our third extract agrees with the former; and corroborates what we have elsewhere said on the true import of our Lord’s expression, “looking on a woman,” &c. in strict coincidence, perhaps, to a sentiment implied in this precept of the apostle. But it was not everywhere that the same strictness prevailed. In remote country places, where few strangers were seen, custom might differ, and be less *punctual*; while in cities, in mercantile cities, where there was a great resort of strangers, it would be necessary to adopt greater *punctiliousness*; and this we find is fact.

“The women, living remote from the world, and being wholly occupied in the management of their

their domestic affairs, appear to be from these circumstances less shy and scrupulous than other women of the East. They make less difficulty of conversing with a stranger, or of exposing their faces unveiled before him.

"As we approached, two women came out to meet us, and respectfully kissed the arms of the Schiechs, who kissed their heads in return. *They wore no veils upon their faces*; their eyes were blackened with lead ore; and they had black spots, impressed as ornaments, upon their brow, cheeks, and chin. These beauties, whose complexion was a yellowish brown, and who were almost naked, immediately asked us for *kochhel*, to blacken their eyes; and for *elhenné* to dye their nails yellow. They regaled us with milk and butter, which had been kept in goat-skins; and gave us bad bread to eat with those dainties." NIEBUHR, vol. i. p. 243.

"We passed the night at Bulgosa. Several of the men of the village came to see us; and after they retired, we had a visit from our hostess, with several young women accompanying her, who were all very desirous to see the Europeans. They seemed less shy than the women of the cities; their faces were unveiled; and they talked freely with us. As the air is fresher and cooler upon these hills, the women have here a finer and fairer complexion than in the plain. Mr. Baurenfeind drew a portrait of a young girl, who was going to draw water, and was dressed in a shirt of linen, chequered blue and white." *Ibid.* p. 292.

"In several places in Arabia the men wear no drawers; but these, with a large shirt, are all the dress used by the lower women. In the Tehama, women of this class wrap a linen cloth about their loins, in the manner of drawers. The women of Hedsjas *veil their faces*, like those of Egypt, *with a narrow piece of linen*, which leaves both the eyes uncovered. In Yemen they wear a *larger veil*, which covers the face so entirely, that the eyes can hardly be discerned. At Sana and Mokha they cover the face with a gauze veil, which is often embroidered with gold. They all wear rings on their fingers, arms, nose, and ears. They stain their nails red, and their hands and feet of a brownish yellow colour, with the juice of the plant *elhenné*. The circle of the eyes, and even the eye-lashes, they paint black, with a preparation of lead ore, called *kochhel*. The men sometimes imitate this mode of painting the eyes with *kochhel*; but persons of sense laugh at so effeminate a practice." NIEBUHR, vol. ii. p. 236.

These extracts may account for some women whom we read of in Scripture being seen *unveiled*. Such, I apprehend, was the undress of Sarah, when seen by the officers of Abimelech and Pharoah; and such might be that of Ruth, when she visited Boaz. But such ought NOT to be the state of *Christian women*, whose profession binds them to the strictest

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purity; at *Corinth*, which was a large city, a mercantile city, a lascivious city;—a city where professors of the gospel were seen, as burning and shining lights: here every decorum should be preserved, and every delicacy maintained—*because of OBSERVERS*. May this be the meaning of the word *angels* in this connection? The word often signifies *spies*; as James ii. 25. Rahab received the *spies* (*angels*, Gr.)—now, what were these *spies* but *observers*, in a looser sense of the word? Vide also Prov. xiii. 17; Mark i. 2; Luke vii. 24. If this interpretation may be admitted, which this is not the place to support, or to enforce, but merely to suggest, then the difficulties of this passage would vanish, and all its embarrassments, which have entangled the learned, would cease. It is clearly a precept of *decorum*.

CHAPTER XV. VERSE 36.

THOU fool, that which thou sowest is not quickened, except it DIE. And that which thou sowest thou sowest not that body which shall be, but bare grain; perhaps wheat, or any other grain. But God giveth it a body as it hath pleased him; to every seed his own body.

To die, here, is plainly put for *ceasing to retain present form and appearance*; but this is not inconsistent with re-appearance, under another form; and this is strictly philosophical; for, that matter does not (*die*,) perish, but assume different modifications, is a principle well known and admitted in philosophy. In the present instance, the succeeding modification is *re-nascence*, or fertility; but every kind of grain, according to its own specific properties, the offspring resembling the parent; which is the subject of daily observation, and open to daily remark. This is one idea of the apostle. But I apprehend there is another:—"Thou sowest *bare*—*NAKED* grain,"—grain separated from its stem, leaves, beard, &c. its outer coverings; it having been threshed, &c. before it is sown: nevertheless, it rises from the earth *with* outer coverings, leaves, stem, beard, &c. according to its nature. It is sown *naked*, it rises *cloathed*; it is sown *imperfect*, it rises *perfect*; it is sown *deprived*, it rises *improved*; it is sown in *dishonour*; it rises *glorious*; so, also, the resurrection of the body, &c.

VERSE 41.

There is one glory of the sun, and another glory of the moon, and another glory of the stars: for star differeth from star in glory. This is true, to the observation of the uninstructed eye; it is true, also, to the experience of astronomers. Indeed, they are the best judges on this subject. Those who, to behold the sun, are obliged to interpose dark glasses, or fluids, blackened by ink; while, to behold the moon, or the stars, they carefully concentrate

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every ray of light which they can collect, must be extremely sensible of the truth of our text. Nor is this all; for the planets, which are commonly reckoned among stars, are certainly much brighter, and more steady in their light than the fixed stars; while these also differ in brilliancy among themselves. They differ in brilliancy to the naked eye; and the eye, by their brilliancy, estimates their distances. But there is another sense in which stars differ in glory; for, through the immensely powerful telescopes of **HERSCHEL**, they appear some *red*, some *green*, some *yellow*, some *white*: no bed of tulips shews greater variety of splendor. The more we know, therefore, the stronger is the import of this passage; and the more correct do the ideas

and expressions of the apostle appear, or rather those of the Holy Spirit, speaking by him.

We should remark also, that the glory of the sun is direct, immediate, native; whereas, that of the moon and planets is reflected: they neither possess nor impart it from themselves; but *shine*, or rather *are resplendent, because their luminary is risen upon them*. But the glory of the fixed stars, though distant, is their own: the interval from them to us is too immense for light to render itself sensible by reflection: if they were not suns, their light could not reach us, in activity. We have no need here to enlarge on the nature or stations of the planets which appertain to our system: for that, vide on Gen. chap. i.

JAMES.

CHAPTER V. VERSE 14.

AN OINTING with OIL, in the name of the Lord.

The use of oil as a medicine has lately been pretty much talked of; and many virtues have been attributed to it. It has been said that if it be applied very early, it is of sovereign efficacy in cases of the plague; and that persons employed in carrying oil about, do not take that disorder. I do not know how far subsequent discoveries may justify this representation; nor do I know how far we may suppose that the patient alluded to by the apostle in this passage might have contributed to his own malady. From the remark, "if he have committed sins, they shall be forgiven him," one is almost

induced to think, that, like the Corinthians, (1 Cor. xi. 30.) certain transgressions might be followed by sickness; to remove which, faith, and repentance, and prayer, were salutary to the mind, while the administration of oil was salutary, in a medical intention, to the person. This idea may be true or, it may be false: it has no consequence whichever might be the fact, yet the following mention of confessing faults, of earnest prayer, of spiritual restoration, and of conversion from sin, seem to follow more naturally, if the restoration of health to the body be connected with the exercise of corresponding sentiments by the mind.

See the use of oil, as a medicament, Mark vi. 13.

JUDE.

VERSE 12.

SPOTS in your FEASTS OF CHARITY. These *agapæ*, or *feasts of charity*, were a very powerful mean, among the primitive Christians, of cultivating mutual affection in their body, and of gaining the good-will of those who observed their conduct; which justifies an idea, that they contributed to promote the Christian cause, by leading to conversion, and by supporting the minds of young converts under the difficulties attending their situation. *Pliny* seems to describe these *agapæ*, when, writing to *Trajan*, he says, The Christians "assemble on a day appointed, to take a common and innocent repast together." And *Tertullian*, (*Apol.* cap. 39.) speaks of them thus: "Nothing low or unseemly is committed in them; nor is it till after having prayed

to God, that the company sit down to table. Food is taken in moderation, as wanted; and no more is drank than it becomes discreet persons to drink. Each takes such refreshment as is suitable, in connection with the recollection that he is to be engaged, in the course of the night, in adorations to God; and the conversation is conducted as becometh those who know that the Lord heareth them. After water has been brought for the hands, and fresh lights, every one is invited to sing, and to glorify God, whether by passages from the sacred Scriptures, or of his own composition. This discovers whether proper moderation has been observed at the table. In short, the repast concludes as it begun; that is to say, with prayer." These institutions, even in the time of the apostles, were attended with inconveniences, arising pretty much from

a too strong sense of the inequalities of rank in life; at length, the rich invited only persons like themselves, or those who were expected to return the favour: consequently, the poor were excluded.

The whole was abolished by the *Council of Laodicea*, Can. 28.; *Synod of Trullo*, Can. 74.; and the *Council of Carthage*, Can. 42.

REVELATIONS.

CHAPTER XIV. VERSE 19.

THE wall of the city had twelve FOUNDATIONS, and in them the names of the twelve apostles of the Lamb. . . . And the FOUNDATIONS of the wall of the city were garnished with all manner of precious stones.

I shall offer, in the first place, on these words, the remarks of a very observant critic, EDWARD KING, Esq. who in his *Munimenta Antiqua*, vol. ii. recently published, has touched on this subject.

"The several alternate rows, or *courses* of stone and brick, as appearing in this wall, at Richborough, were by the Greeks, who lived in Roman times, called *Θεμελίοι*, or *Θεμελῖα*; and are the kind of ornaments alluded to by St. John, as being so highly beautiful, according to every one's apprehension in his days; when, in his emblematical representation of the walls of the holy city, in the prophecy of the Revelations, he speaks of such being formed of *precious stones*. The word *Θεμελῖα*, is, in our translation of the passage, very improperly rendered, as far as relates to a consistency with our modern ideas, *foundations*, instead of *courses*; and this mis-translation occasions much confusion in the minds of most persons who attempt to read the prophet's sublime description.

"Nevertheless, why these alternate rows either of brick, or of smooth flat stones, were anciently called *Θεμελῖα*, or *Θεμελίοι*, *foundations*, (though the word seems now so uncouth and inapplicable in our ears,) is yet apparent enough; for whoever examines Roman walls attentively, will find that most usually the broader alternate rows of rude stone, or flints, or rubble and mortar, were evidently constructed merely by having the whole mass flung carelessly into a great *caisson*, or frame of wood, whose interior *breadth* was that of the wall; and whose *depth* was that of the space between the alternate rows of bricks; and whose length was sometimes more and sometimes less, just as suited convenience; and that the parts thus reared, one at the end of another, on, and over each row of bricks, were united together afterwards, merely by means of very small stones and mortar, thrown into the narrow space left at the ends between them. As therefore these *caissons* were removed up from one row of bricks, or smooth stones, to another superior row, in constant repetition, according as the wall advanced in height, and were placed successively on every row; those substantial rows of bricks, regularly placed, might very

well be called *Θεμελίοι*, or *Θεμελῖα*, or *foundations* because, indeed, *such* they really were, the whole way up, to those identical building frames." So far the learned writer.

The reader will now turn back to 1 Chron. xxix. 2. where he will see that we hazarded a rendering perfectly agreeable to this principle: supposing that *courses* of *black marble* were ranged in a pattern, together with *veined marble*, *white marble*, &c. and *stones of filling up*, for the internal construction. If this may be admitted, then we perceive that the apocalyptic writer had in recollection whatever was most superb or ornamental in the most magnificent construction of his nation; and one passage gives light to the import of the other.

But this is not all; for the same error which has rendered *Θεμελίοι*, *foundations*, has confused the application of *precious stones*, as employed to adorn buildings in the East. To illustrate this passage still further, and partly for the sake of Isaiah liv. 12. "*O thou afflicted—I will lay thy foundations with SAPPHIRES—thy gates of CARBUNCLES—thy borders of PRECIOUS STONES*," waving what might be said on the *gates* and *borders*, which appear to be terms of Hebrew architecture, we shall quote a passage from FRANKLIN'S *Hist. of Shah Allum*, 4to. p. 212, 213, which shews the employment of such precious stones; and may stand as a comment on the representation adopted by the prophet, which usually appears to us to be a mere waste of valuable materials, an expensive luxury, without an object.

"The first object, after entering, that attracts attention, is the *Dewaun Aum*, or public hall of audience, for all descriptions of people. It is situated at the upper end of a spacious square, and though at present much in decay, is a noble building. On each side of the *Dewaun Aum*, and all round the square, are apartments of two stories in height, the walls and front of which, in the times of the splendour of the empire, were adorned with a profusion of the richest tapestry, velvets, and silks; the nobles vying with each other in rendering them the most magnificent, especially on festivals and days of public rejoicings, which presented a grand sight. [Vide on *Esther* i. 6. plate.]

"From the *Dewaun Aum* we proceeded through another handsome gateway to the *Dewaun Khass*. This building likewise is situated at the upper end of a spacious square, elevated upon a terrace of marble

marble about four feet in height. The *Dewaun Khass*, in former times, was adorned with excessive magnificence; and though repeatedly stript and plundered by successive invaders, still retains sufficient beauty to render it admired. I judge the building to be an hundred and fifty feet in length, by forty in breadth. The roof is flat, supported by numerous columns of fine white marble, which have been *richly ornamented with inlaid FLOWER-WORK of different COLOURED STONES*: the cornices and borders have been decorated with a frieze and sculptured work. The cieling was formerly incrustated with a rich foliage of silver throughout its whole extent, which has been long since taken away. The delicacy of the inlaying in the compartments of the walls is much to be admired; and it is a matter of bitter regret to see the barbarous ravages that have been made by *picking out the different CORNELIANS*, and breaking the marble by violence. Around the exterior of the *Dewaun Khass*, in the cornice, are the following lines, written in letters of gold, upon a ground of white marble:

"If there be a paradise upon earth, this is it—'tis this—'tis this!"

"The terrace of this building is composed of large slabs of marble, and the whole building is crowned at top with four cupolas of the same materials. The royal baths built by Shah Jehan are situated a little to the northward of the *Dewaun Khass*, and consist of three very large rooms, surmounted by domes of white marble. The inside of them, about two thirds of the way up, is lined with marble, *having beautiful borders of FLOWERS, WORKED IN CORNELIAN AND OTHER STONES*, executed with much taste.—The floors are paved throughout with marble, in large slabs: there are fountains in the center, which have passes to carry the water into the different apartments; large reservoirs of marble, four feet in depth, are placed in the walls. The light is admitted from the roof, by windows of stained glass; and capacious stoves, with iron gratings, are placed underneath each separate apartment."

Something similar to this appeared on the tomb of King *Henry III.* in Westminster Abbey, which was richly garnished with *jasper*, and other pre-

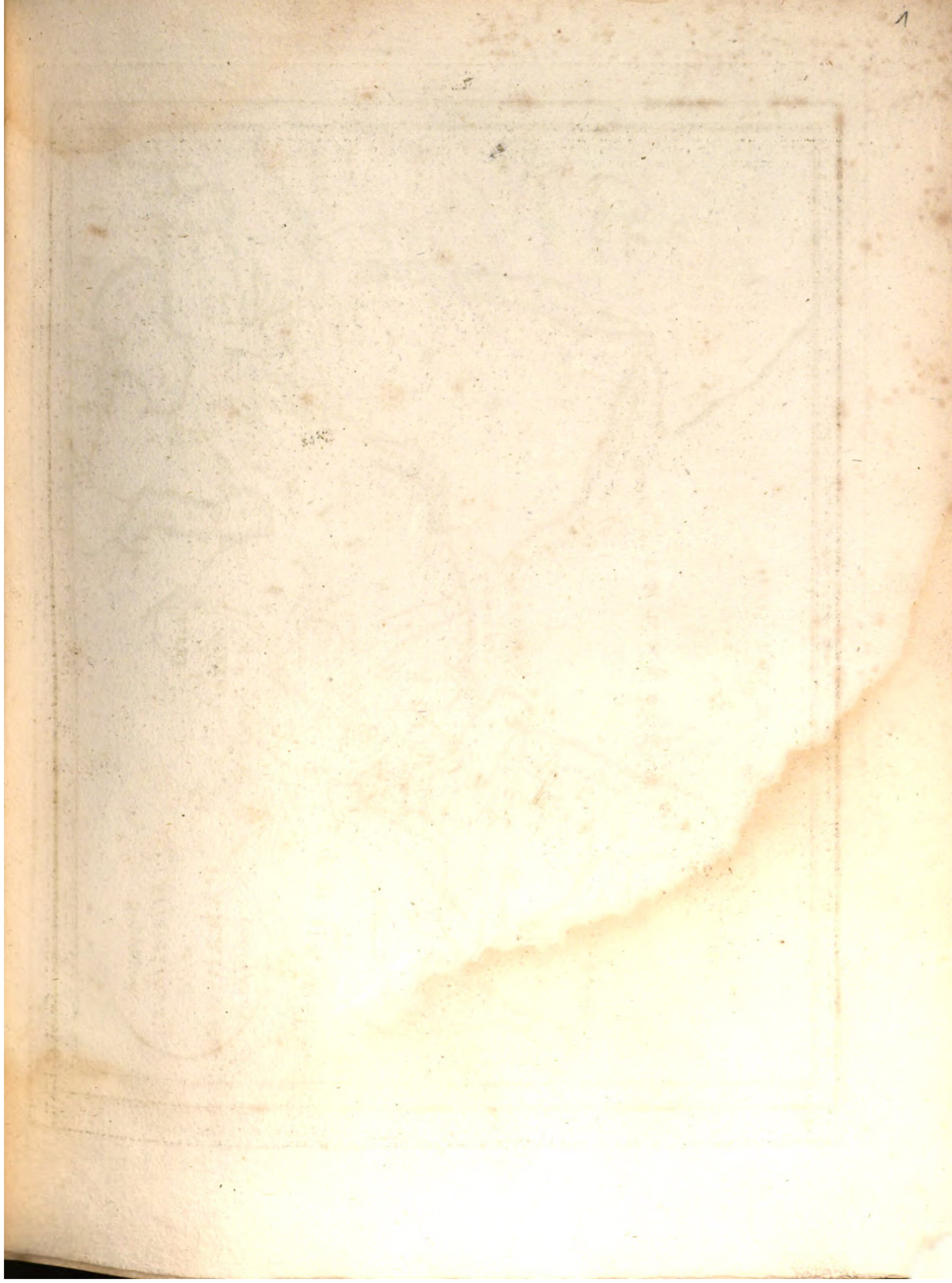
cious stones, in flower-work; the traces of which only now remain, to excite our regret for their loss.

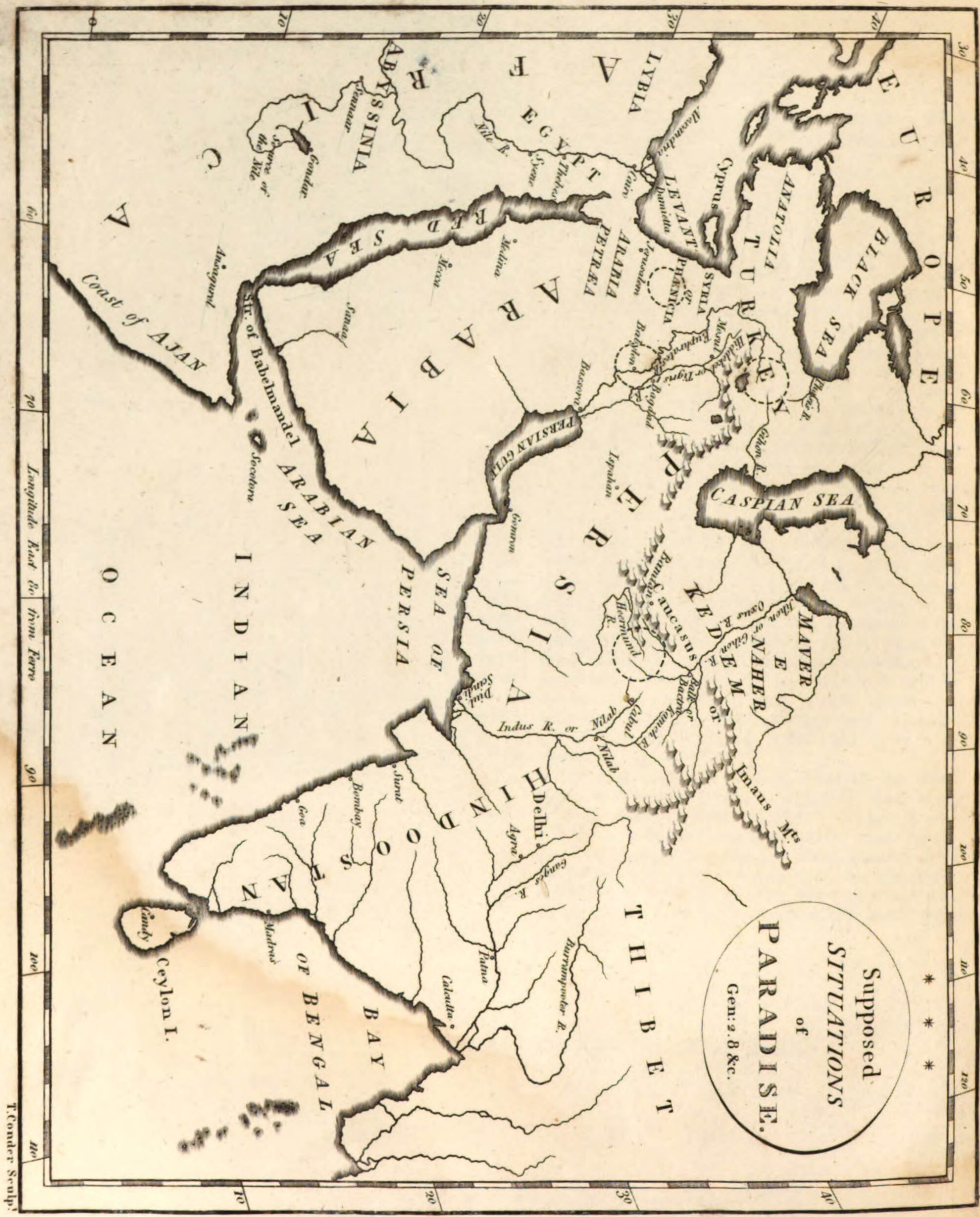
CHAPTER XXI. VERSE 25.

THERE SHALL BE NO NIGHT THERE. This passage describes a residence very different from our own: once all was night, darkness, desolation, on *this globe*, which we inhabit; and in its best estate, only half of it enjoys light, the other half being in darkness. Whether it revolve, or whether it rest, this is its lot; half only can enjoy the day. If this passage describe a different world, it also describes different inhabitants. Could mortals bear perpetual day? without night for repose, for recruiting strength, wasted and worn in the activities of life? No; this passage cannot refer to us, in our present condition; flesh and blood cannot sustain the glory; we must stay till this mortal shall have put on immortality, till this corruptible have put on incorruption, till death be swallowed up of life:—then may we support incessant day—the brilliancy, the ardour, the penetration of light itself, we may then *enjoy*, in degrees now utterly inconceivable; and then, too, may the righteous themselves "shine as the sun in the kingdom of their father." If any in the mean time is desirous of asking, *where* shall this be?—we must answer with modesty—with conjecture:—it may be on the globe of our sun itself that our appointed new heaven, (atmosphere,) and new earth, exist; it may be in some of those regions where the telescope of the astronomer sees vast expanses of light;—light diffused in one wide flood, in which all inhabitants are immersed. *There* glows no sun, in which light is concentrated; *there* is no mass of light, specifically appointed to supply that important fluid: all is incessantly enlightened; all emits light, as well as receives it; all is light.

The *beginning* of this department of our work was in *darkness*, in *gloom*, only partially dissipated, at best: but we close it with a subject whose effulgence is beyond our conception, whose splendour and fervour exceeds our imaginations;—and well it may;—"for eye hath not seen, nor ear heard, neither hath entered into the heart of man, the things which God hath reserved for those who love him!"

END OF THE EXPOSITORY INDEX TO THE HOLY BIBLE.





Supposed
SITUATIONS
of
PARADISE.
Gen: 2. 8 & c.

DISPUTING THE LOCATION OF PARADISE

CHAPTER V

THAT the situation of Paradise, which is not only the seat of the world, would be but necessarily situated in the most fertile, most fertile little world. The first thing that we must not overlook is information from those who have been in the most judicious, and if, in despite of all that has been said, we still conjecture is the highest in which we can be brought to it. It is undoubted that the sacred history and the sacred poetry which was the original source of all that we now call the state of innocence, was composed in a country, and the state of innocence, that his meaning might be understood. It is not only the labours of the learned in this subject, but the most interesting, let such an one consider, what could induce the sacred history, speaking by Moses, to employ so much attention, and so much of the very subject; and let the result of that consideration be what it may.

Many attempts have been made to fix the site of the Garden of Eden. Some have placed it in Syria; others at the head of the Euphrates in Armenia. Among these we had ranged ourselves. *Huetius* placed it near the river, near the mouth of that river. The *Siberians* told the *Cossacks* that Paradise was in Siberia; while the supposition that it might be situated in the ocean, has been entertained by some, because they could not understand it to be on *terra firma*; which very reason has led others to suggest, that the Paradise of heaven was once let down to earth, but after a time was taken up again.

In conducting this inquiry, the first thing necessary appears to be, to determine the four rivers, the courses of which are described by the sacred writer. And having presumed that the Euphrates and Tigris, whose situations are well known to us, were two of those rivers, it has been concluded that the other two must be such streams as approached them, either in their origin, or in some part of their extent.

We have inferred from sundry considerations, that Paradise was placed on a mountain, or at least in a hilly country: because, only such a country could supply the springs necessary to form four heads of rivers; and because all heads of rivers are in hills, and from thence their waters descend to the sea. Such a country we had found, as we thought, in Armenia, and such an elevated, or advantage of elevations, also as appeared to be proper for the purpose. On our principles, the *Phasis* was the *Phison* of Moses, and the *Araxes* of *Armenia* seemed calculated to confirm the opinion; it was a natural river.



Supposed
SITUATION
of
PARAIOISE.
1780

INQUIRIES RESPECTING THE SITUATION OF PARADISE.

WITH A MAP.

GENESIS, CHAPTER II. VERSE 8, &c.
GENESIS, CHAPTER II. VERSE 8, &c.

THAT the situation of Paradise, which is universally placed in the eastern part of the world, should be but imperfectly understood in the western part of the world, need occasion little wonder. We have neither memorials of our own, nor adequate information from those who have travelled into the East, to direct our judgment; and if, in despair of further information, we presume to conjecture—conjecture is the highest to which our researches attain. Nevertheless, it is undeniable that the sacred historian has endeavoured to describe that country which was the *original* station of mankind, the seat of man in his state of innocence, with considerable attention; and has taken a good deal of pains that his meaning might be understood. If any reader should unadvisedly deem the labours of the learned ill employed on a subject he may think uninteresting, let such an one consider, what could induce the Sacred Spirit, speaking by Moses, to employ so much attention, as it is clear he has done, on this very subject: and let the result of that consideration vindicate their labours.

Many attempts have been made to fix the *site* of the Garden of Eden. Some have placed it in Syria; others at the head of the Euphrates, in Armenia; and among these we had ranged ourselves. *Huetius* placed it lower down on the Euphrates, near the mouth of that river. The Siberians told the Czar Peter, that Paradise was in Siberia; while the supposition that it might be covered by the ocean, has been entertained by some, because they could not ascertain its locality on *terra firma*; which very reason has led others to suggest, that the Paradise of Heaven was once let down to earth, but after a time was taken up again.

In conducting this inquiry, the first thing necessary appears to be, to ascertain the four rivers, the courses of which are described by the sacred writer; and having presumed that the Euphrates and Tigris, whose situations are well known to us, were two of those rivers, it has been concluded that the other two must be such streams as approached them, either at their origin, or in some part of their extent.

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GENESIS, II, 8, &c.

quence,

quence, that the *Araxes* should be the *Gihon*, whose waters are extremely rapid, and whose Greek name *Araxes*, like the Hebrew word *Gihon*, denotes the dart, or swift.

Such were our principles, and they were supported by the opinions of the learned world; when lo, forth comes Capt. WILFORD from his study of the *Puranas*, and opens what is at least a *new source* of information; to which we shall direct our attention, yet without yielding our assent, till after it has been fairly examined. The following are Extracts from “A Dissertation on Mount Caucasus;” in the *Asiatic Researches*, Vol. vi. p. 455.—*Lond. Edit.*

“*Persian* authors are constantly confounding *Bámíyan* and *Báhlac* together; the first they call *Bálkh-Bámíyan*, and the second *Bálkh-Bokhárá*. When they speak of the metropolis of the fire-worshippers, it is to be understood of *Bámíyan* alone, according to the followers of BUDDHA, and the author of the *Buddha-dharmachárya Sindhu*. According to *Persian* authors, *Bámíyan* must have existed before the flood; but the followers of BUDDHA insist that it was built by a most religious man called SHAMA, who appears from particular circumstances to be the same with the famous patriarch SHEM; and that his posterity lived there for several generations. Hence *Bálkh-Bámíyan* is said to be originally the place of abode of ABRAHAM, (TH. HYDE, p. 29 and 494.) who, according to Scripture, and the *Hindu* sacred books, removed with his father to distant countries westward.”

“According to DIODORUS the *Sicilian*, *Bámíyan* existed before NINUS: for this historian, like the *Persian* authors we have mentioned, has mistaken *Báhlac* for *Bámíyan*; which he describes as situated among steep hills: whilst *Báhlac* is situated in a low, flat country, and at a great distance from the mountains.”

“The natives look upon *Bámíyan*, and the adjacent countries, as the place of abode of the progenitors of mankind, both before and after the flood. By *Bámíyan* and the adjacent countries, they understand all the country from *Sistán* to *Samarcand*, reaching towards the East as far as the *Ganges*. This tradition is of great antiquity, for it is countenanced equally by *Persian* authors, and by the sacred books of the *Hindus*.”

“According to the *Puránas*, SWAYAMBHUYA or ADIMA, SATYAVRATA or NOAH, lived in the north-west parts of *India* about *Cashmir*.”

“From particular circumstances it appears, that SATYAVRATA before the flood lived generally in the countries about the *Indus*, between *Cabul* and *Cashmir*; and if we find him in *Dravira* or the southern parts of the peninsula, it seems that it was accidentally, and that he went there only for some religious purpose. Even after the flood, he resided for some time on the banks of the *Indus*. According to tradition, which my learned friends here inform me is countenanced by the *Puránas*, he lived and reigned a long time at *Bettoor*, on the banks of the *Ganges* and to the south of *Canoge*.”

“Thus,

“ Thus, according to an uniform tradition of a very long standing, as it is countenanced by the *Hindu* sacred books and *Persian* authors, the progenitors of mankind lived in that mountainous tract which extends from *Bálkh* and *Candáhár* to the *Ganges*; we may then reasonably look for the terrestrial paradise in that country; for it is not probable, that *ADIMA* and *ADIME* or *IvA* should have retired to any great distance from it. Accordingly, we find there such a spot, as answers minutely to the *Mosaical* account; a circumstance, I believe, not to be met with any where else on the surface of the globe. A small brook winds through the *Tágávis* of *Bámíyan*, and falling into a small lake, divides itself into four heads, forming so many navigable rivers. “ *The first called Phison compasses the whole country of Chávilá, where gold is found; and the gold of that country is good: There is also Bdelium and Sardonyx.*” The country of *Chávilá* is probably that of *Cabul*: it is a very ancient denomination; for *PTOLEMY* calls its inhabitants *Cabolitæ*, and the town itself *Cabura*, which is obviously a corruption from *Cabul*; so the *Persian* name for a *shed* or *pent-house* is indifferently pronounced *Cabul* and *Cabur*. Tradition says, that *Cabul* was built by an ancient king of that name; and the place where he lived, is still shewn near *Cabul*: they generally call him *SHAH CABUL*. Gold is found in the sands of the *Indus*, above *Derbend*, but in greater quantity about *Cábul-grám*, to the north of *Derbend*, and in the rivers, which fall into the *Indus* from the west. It is found also near the surface of the earth in these parts, but the natives are too indolent to dig for it. The gold found in the sands, I am told, is not so pure as that found by digging the earth to a considerable depth. This country abounds with divers sorts of precious stones, such as the *Lapis Lazuli*, the *Yacuth* or hyacinth; crystal, marble of various colours, and razor stones of a superior quality. The *Phison* appears then to be the *Landi-Sindh*, or lesser *Sindh*, called also *Niláb*, from the colour of its waters, which are deep and limpid. This river, is also denominated the *Nilá-Gangá*, or simply *Gangá*, by *Hindus*; and it is called *Ganges* by *ISIDORUS*, when he says that the best *Assa-fatida* grows on the mountains of *Oscobagi*, at the source of the *Ganges*. *Oscobagi* is obviously derived from *JESHU-BEG*, the lord *JESHU*, another name for the famous *RASA'LA* or *BRONGUS* who dwelt at *Bámíyan*, whose colossal statue is to be seen there to this day, and of whom I shall speak more fully hereafter. The true name of that place commonly called *Ybaug*, and *Jyback* by Major *RENNELL*, between *Cabul* and *Bálkh*, is *AI BE'G*, *Dominus Lunus*, our Lord the Moon. There are in its vicinity, in the mountains, several curious remains of antiquity. *JEROME* says also, that the *Phison* was called *Ganges* in his time. They were both perfectly right; though it is almost certain, that they understood by it the great *Ganges*. *HESYCHIUS* says, that the *Phison* was thus called, because it flowed from a *fissure*, *gap*, or *mouth*. If so this appellation is synonymous with *Cophes*, the ancient name of the *Landi-Sindh*, as will appear hereafter.”

“ *The second river was the Gihon which compassed the land of Cush:*” this is the *Hir-Mend*; and the country is the original land of *Cusha* of the *Purá-nas*, which begins near *Candahar*, and includes part of *Iran* or *Persia*. In a former essay on *Egypt*, I had carried too far the eastern limits of that country.

“ *The third river is the Hiddekel, which runs toward, or through, the eastern parts of the land of Assur.*” This appears to be the river of *Báhlac*, which runs through the eastern part, and seems to have been once the eastern boundary of the land of *Hassarah* or *Házarah*. This country extends from *Herát* to *Báhlac* and *Bámíyan*. From the unsettled disposition of its inhabitants, its boundaries cannot well be defined. They consider themselves as the *aborigines* of that country; and like the *Arabs*, were never thoroughly subdued. They are very numerous and brave, but incapable of discipline. They are *Musulmans*; but retain still many heathenish and superstitious customs, at least in the opinion of their neighbours. The principal tribes are the *Daicándi*, *Taimáni*, &c. the first live between *Herát* and *Dawer*: and the others toward *Marx-Shájéhán*. This is probably the country of *Arsareth* of the apocryphal book of *Esdras*. “ *The fourth is the Frat,*” of which no particulars are recorded. It is the river of *Cunduz*.

“ It appears from Scripture, that *ADAM* and *EVE* lived afterwards in the countries to the eastward of *Eden*; for at the eastern entrance of it, *GOD* placed the angel with the flaming sword. This is also confirmed by the *Purá-nics*, who place the progenitors of mankind on the mountainous regions between *Cabul* and the *Ganges*, on the banks of which, in the hills, they shew a place, where he resorted occasionally, for religious purposes. It is frequented by pilgrims, and is called *Swayambhuva-sthán*: I have not been able yet to ascertain its situation, being but lately acquainted with it: but I believe it is situated to the north-west of *Sri-Nagar*.”

“ At the entrance of the passes, leading to the place where I suppose was the garden of *Eden*, and to the eastward of it, the *Hindus* have placed a destroying angel, who generally appears, and is represented like a *Cherub*; I mean *GARUD'A*, or the *Eagle*, upon whom *VISHNU* and *JUPITER* are represented riding. *GARUD'A* is represented generally like an eagle; but in his compound character, somewhat like the *Cherub*, he is represented like a young man, with the countenance, wings, and talons of the eagle. In scripture, the Deity is represented riding upon a *Cherub*, and flying upon the wings of the wind. *GARUD'A* is called the *Vahán* (literally, the vehicle) of *VISHNU* or *JUPITER*, and he thus answers to the *Cherub* of Scripture; for many commentators derive this word from the obsolete root *C'harab* in the *Chaldean* language, a word implicitly synonymous with the *Sanscrit Vahán*.

“ The city of *Bámíyan* being represented as the fountain of purity and holiness, it was called with propriety *Pará-Bámíyan*, or *Bámíyan* the pure and holy; for the same reason the district of *Bámíyan* might be called *Paru-désa*, or *Pára-désa*, the pure and holy country. This district is now barren, and without

without a single tree. The sacred books of the *Hindus*, and of the *Bauddhists*, do, however, declare most positively, that it was otherwise formerly. Tradition informs us also, that the number of inhabitants was at one period so prodigious, that the trees, underwood, grass, and plants were destroyed. The vegetable soil being no longer protected, was in the course of ages washed away by the rains. Certain it is, that the soil in the valleys is most fertile, and the whole district, such as it is now, is still a most enchanting and delightful spot. The country to the eastward of *Bámíyan*, as far as the *Indus*, is the native country of the vine, and of almost all the fruit-trees we have in *Europe*: there they grow spontaneously and to a great degree of perfection. When the natives find a vine, an apple-tree, &c. in the forests, they clear all the wood about it, dig the ground, and by these means, the fruit comes to perfect maturity. When we are told in Scripture of NOAH's cultivating the vine, we may be sure, that it was in its native country, or at least very near it."

We have ventured elsewhere to suppose that the genealogy from Adam to Noah, is that of princes or sovereigns, in the same country; and that Noah resided before the deluge, nearly on the same spot where afterwards he quitted the ark; in the country which had been the original birth-place of mankind; at no very great distance from Paradise: though all distinction of Paradise, as to its super-eminent fertility, &c. was, no doubt, destroyed by the waters. We shall add a few words from Capt. Wilford on this subject.

"The summit of *C'haisá-ghar* is always covered with snow; in the midst of which are seen several streaks of a reddish hue, supposed by pilgrims, to be the mark, or impression made by the feet of the dove which NOAH let out of the ark. For it is the general and uniform tradition of the country, that NOAH built the ark on the summit of this mountain, and there embarked: that, when the flood assuaged, the summit of it first appeared above the waters, and was the resting-place of the dove, which left the impression of her feet in the mud, which with time, was hardened into a rock. The ark itself rested about half way up the mountain, on a projecting plain of a very small extent. There a place of worship was erected, near which is a caldron of copper of such dimensions, that one hundred maunds of food may be dressed in it at the same time. Near it is an hermitage inhabited by several *Derveishes*, and a little above, is a flag. The inhabitants of the country resort there occasionally on *Fridays*. With respect to the foot-steps of the dove, they are known only by tradition, for the inhabitants of that country assert, that they have never heard of any body going up so high on account of the ruggedness of the mountain, and of the snow. The *Bhauddhists*, who were the first inhabitants of that country, are, I am told, of the same opinion as to the place where the ark rested; but hitherto I have been able to procure a single passage only, from the *Buddha-dharma-chárya-Sindhá*, in which it is declared that SHAMA or SHEM, travelled first to the north-east, and then turning to the

the north-west, he arrived on the spot, where he built afterwards the town of *Bámiyan*. SHAMA they say, having descended from the mountain of *C'haisa-ghar*, travelled north-east, as far as the confluence of the *Attock* with the *Indus*; where he made *Tapasya*: he then proceeded north-west to *Bámiyan*."

"The *Pauranics* insist, that, as it is declared in their sacred books, that SATYAVRATA made fast the ark to the famous peak, called from that circumstance *Nau-bandha*, with a cable of a prodigious length; he must have built it in the adjacent country. *Nau* (a ship) and *bandha* (to make fast), is the name of a famous peak situated in *Cashmir*, three days journey to the north-east of the purganah of *Lar*. This famous place is resorted to by pilgrims, from all parts of *India*, who scramble up among the rocks to a cavern, beyond which they never go. A few doves, frightened with the noise, fly from rock to rock: these the pilgrims fancy to be their guides to the holy place, and believe, that they are the genuine offspring of the dove, which NOAH let out of the ark.* At all events, in the numerous legends which I have extracted from the *Puránas* relating to SATYAVRATA and the ark, no mention is made of his letting out the dove."

"The mountains of *Coh-Suleiman* are sometimes called by the natives the mountains of the dove: the whole range as far as *Gazni* is called by PRO-LEMY the *Paruetoi mountains*, probably from the *Pár'vata* or *Párávat*, which signifies a dove.

"The followers of BUDDHA acknowledge that the ark might have been fastened to *Nau-bandha* near *Cashmir*; but surely they say, the ark could not have been riding perpendicularly above this peak, and such a vessel required a vast length of cable: in short though the cable was made fast at *Nau-bandha*, the ark was riding above *C'háisa-ghar*. According to the *Pauranics* and the followers of BUDDHA, the ark rested on the mountain of *Aryavarta*, *Arya-wart* or *India*, an appellation which has no small affinity with the *Araraut* of Scripture. These mountains were a great way to the eastward of the plains of *Shinar* or *Mesopotamia*, for it is said in *Genesis*, that, some time after the flood, people journeyed from the east, till they found a plain in the land of *Shinar*, in which they settled. This surely implies that they came from a very distant country to the eastward of *Shinar*. The region about *Tuckit-Suleiman* is the native country of the olive-tree, and I believe the only one in the world. There are immense forests of it on the high grounds; for it does not grow in plains. From the saplings, the inhabitants make walking-sticks, and its wood is used for fuel all over the country; and as PLINY justly observes, the olive-tree in the western parts of *India*, is sterile, at least its fruit is useless, like that of the *Oleaster*. According to FENESTALLA, an ancient author cited by PLINY, [N. Hist. lib. xii. c. 6.] there were no olive-trees in *Spain*, *Italy*, or *Africa*, in the time of TARQUIN the eldest. Before the time of HESIOD, it had been introduced into *Greece*: but it took a long time before it was reconciled to the climate, and its cultivation properly understood: for

* Is it possible that there should be any reference to a commemoration of Noah's dove, in the title to Psalm lvi.

"To the chief musician: On the dove—silent—in distant countries."

for HESIOD says, that, whoever planted an olive-tree, never lived to eat of its fruit. The olive-tree never was an native of *Armenia*; and the passage of STRABO, cited in support of this opinion, implies only, that it was cultivated with success in that country."

In justice to Capt. WILFORD it should be remembered that several among the Fathers of the Christian church, believed the *Nile* to be one of the rivers of Paradise; and—whether they have not properly explained themselves—(or indeed, only reported the words of others without justly understanding them); or—whether because we ourselves were best acquainted with it, we have been induced to look to the *Egyptian Nile* as what they referred to, and this river rising far enough south in Africa, to render the application ridiculous, it has been passed over with a smile. But if the *Nilab*, or *Indus*, was the river they referred to, then the words assume a very different meaning; and indeed they bear a testimony very consistent with that extracted from the *Puranas*.

This is further supported by a letter of Alexander the Great, who writing to his mother, when far advanced toward India, informs her that he approached the head of the *Nile*. Some from hence have thought he meant the head of the *Egyptian Nile*: but this, as all geographers know, would have been contradictory and senseless; whereas, if it were the *Nilab* to which he referred, then it proves at least the antiquity of this name; while it shews by what means the Fathers might become acquainted with a *Nile* which was not the Egyptian. But why should Alexander pay such attention to this river, or why desire to explore it?—Connect this with his writing by way of information that the Gods had been human persons and had dwelt on earth,—with his wishing to pass for a son of Jupiter (who dwelt on mount *Casius*; *i. e.* mount *Cau-CASUS*), and with the well known proverbial saying, that the head of the Nile [the residence of the Gods?] had never been discovered.

If the foregoing suggestions be admissible, their consequence will be that it was not the *Egyptian Nile* whose head *originally* and primarily occasioned the proverb; but there was couched under the expression an allusion to a dogma of pagan theology; and from the various opinions to which the question of the situation of Paradise has given rise among Jewish rabbis, and Christian divines, we see the same inquiry equally embarrassing in another form. The reason for this ignorance might probably be, the prohibition among the Hindoos of passing these sacred rivers; which if it were an *early* appointment, might be long maintained by tradition; though subsequent circumstances have since induced them on a few incidental occasions to evade it. Our Plate comprises those countries which have been alluded to as the seat of Paradise.

We observe, 1, that the head of the Egyptian Nile is very far south in Africa; and that between this source and the Euphrates, in Asia, there is such an intervention of land and water, as renders perfectly laughable the opinion of some, that these rivers might spring from the same source *under ground*,

ground, though they appeared so distant from each other above ground. The Egyptian Nile must certainly be excluded from among the rivers of Paradise.

2. The labour employed to find Paradise in Judea, (as at Jerusalem) or in Phenicia, or Syria, has evidently been misapplied;—no lake in that country is capable of furnishing four streams from one reservoir.

3. The same, I think, must be said of the notion of Huetius, who placed Paradise on the lower branches of the Euphrates and Tigris: two streams above the garden running *into* it, and the same two streams below the garden running *out* of it, could never be the four *heads* which Moses describes.

4. The situation of Paradise, in Armenia, where the heads of the Euphrates and Tigris spring, where the head of the Araxes, and a branch of the Phasis, rise not very distant, according to the best accounts we are able to procure of that country, (which, however, are not altogether satisfactory) has many plausibilities in its favour. Nevertheless, there is this to be said against it, that mankind could not journey *from the East* to Babylon, if Armenia were the seat of Noah's deliverance; and if that seat were adjacent to Paradise, as we have uniformly supposed. [The reader will consider what we have said on the nature of Paradise, in the Expository Index on Genesis, ii. 10.]

5. The situation of Paradise on Mount Caucasus, unites all those requisites which are deemed necessary coincidences with the Mosiac narration. Mountains furnish the sources of rivers; many rivers rise in these mountains. Paradise furnished four rivers; four rivers rise adjacently in these mountains. Mankind travelled *from the East* to Babylon; these mountains are *East* of Babylonia. But the names of these rivers are utterly unlike those of Moses:—They appear so at present; yet, perhaps, when their ancient names, or their import, *as descriptive appellations*, shall be ascertained in both languages, this may be reconciled; and this demands, and deserves reconciliation.

It should not be forgot, that *two* rivers were known in antiquity under the name of *Araxes*; 1, that laid down in our map under that title: 2, the *Oxus* or *Jihon*; for that this river was meant to be described by Herodotus under the name *Araxes*, as also it is by Strabo, is rendered very probable by Major RENNELL, Geog. Herodotus, p. 205, 206. This *Jihon*, or *Araxes*, (the Swift) is one of the rivers of the *Caucasean* Paradise.

Those places which have been proposed as situations of the garden of Paradise, are marked in our map by circles of dots. Nobody can imagine that we mean to indicate them with any precision; we merely wish to denote that an extent of country was probably included in this highly finished Garden of Pleasure. The reader will judge on the nature, &c. &c. of each of these countries, and will accept, as perfectly open to assent or dissent, every sentiment contained in this endeavour to assist his determination.

N^o 3.



N^o 11.



N^o 7.



N^o 12.



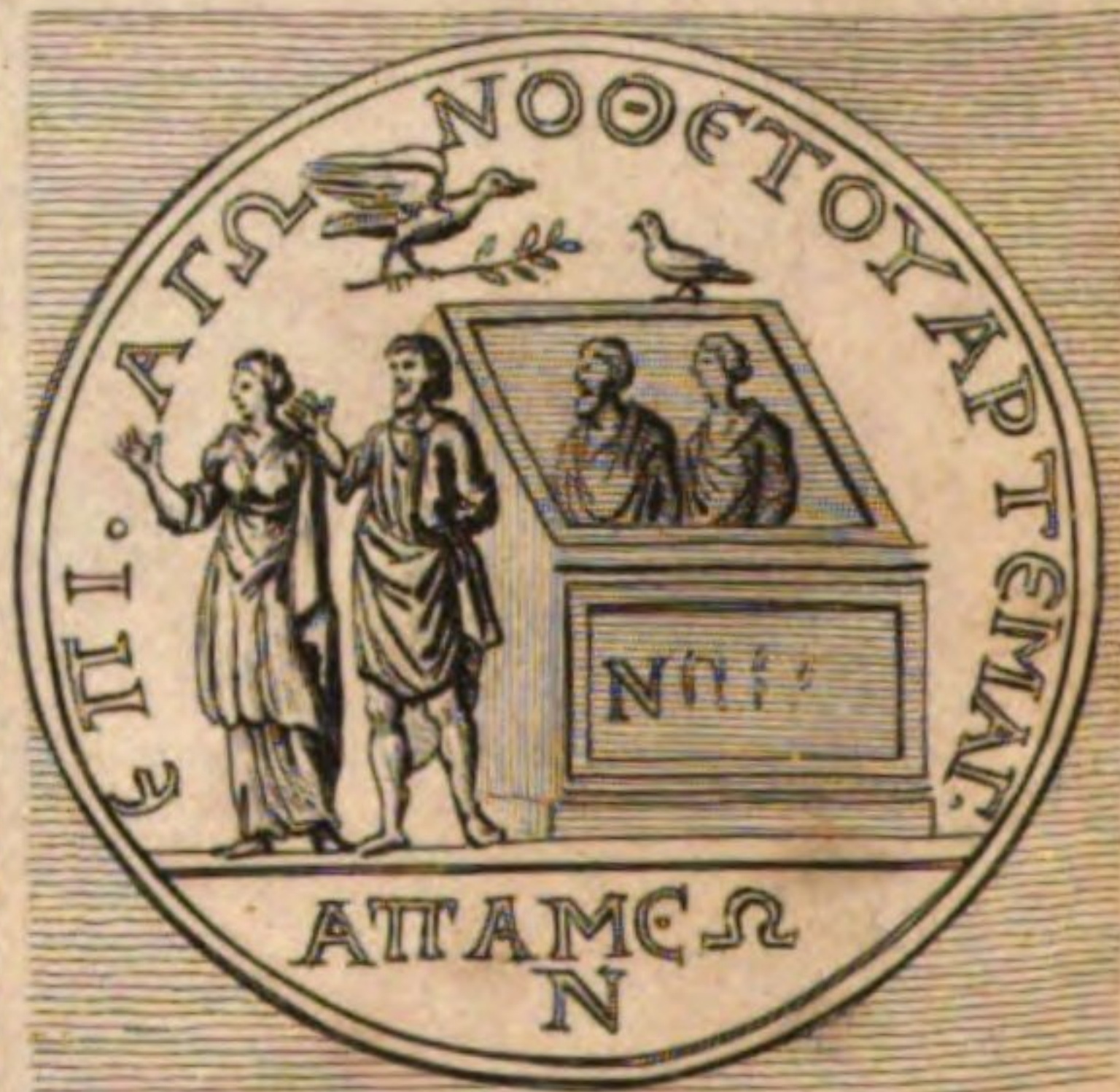
N^o 8.



N^o 2.



N^o 4.



N^o 4.



N^o 9.



N^o 5.



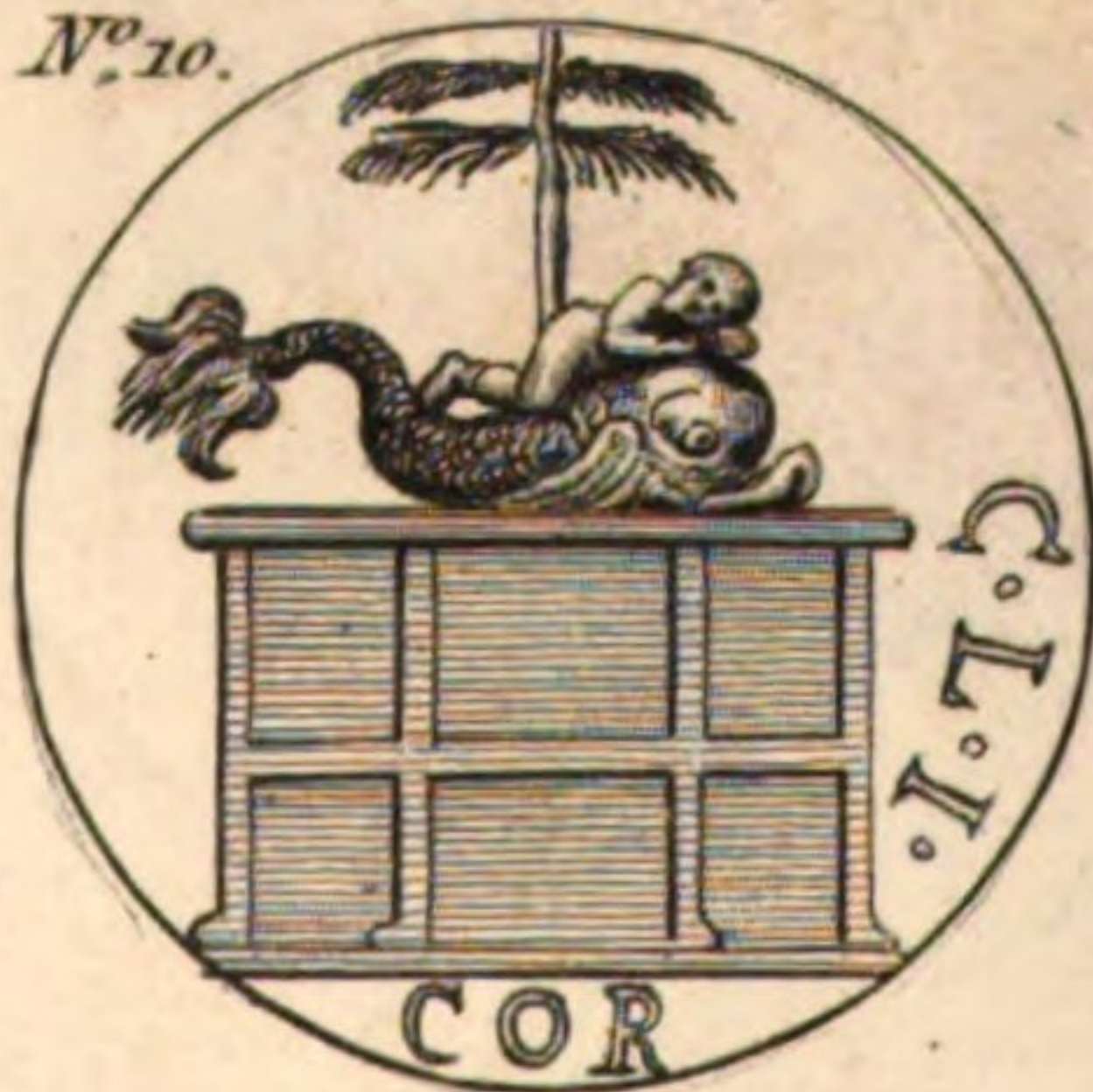
N^o 1.



N^o 6.



N^o 10.



ON THE FORM AND CONSTRUCTION OF NOAH'S ARK.

It has something of the appearance of romance in attempt at this period of time, to demonstrate, or accurately to describe, the form and the construction of that very ancient edifice, the Ark of Noah: the mere mention of it seems like proposing an effort of imagination, rather than a result of rational investigation and matter of fact. Nevertheless, we are ventured when considering in its place that passage of Genesis where the history of the Ark is related, to offer some representations customary on the subject, it may be better to adopt that opinion, by what may be accepted as authority. We shall place first the assistance derived from Scripture: and then shall advert to some points preserved among other families, and other settlements, of mankind.

The Ark of Noah, Gen. vi. 3c. is called *tebek*, or *chebek*, or *cheber*: this name is given also (and only) to the ark of bulrushes in which Moses was preserved, Exod. ii. 3. 5. It signifies a *hollow*—*empty*—*and*: meaning, it is presumed, not an open basket, or any other open receptacle, but a strictly covered *chest* or *coffer*, box, or trunk; and this idea of a *trunk* is what most accurately suits the use of it: an infant might be securely enclosed in a trunk, and a trunk would float safely on the waters. The word *cheber* I apprehend does not designate the form, but the nature of this vehicle.

Having ventured to describe the Ark of Noah, as merely a variation from the customary construction of houses for residence, and to change its character, from that of a house for standing, to that of a house for floating, we shall in the first place compare it with the ordinary houses of the East, [See Fig. 1. on the Plate: this is from Niebuhr's *Travels in Arabia*] observing, that these houses are constructed of upright supports (partly) of timber, which are plastered over with clay;—as this on the Plate appears to be, both externally and internally: so far our sentiments are justified by this figure. As to the application of reeds, split and laid across these quarterings, as supposed to be the usage of Noah is so similar, so common every where, and the construction so simple and natural, that merely to mention it is sufficient. The same may be said of the coating with bitumen. This substance was employed on account of its property of resisting water: the mode of its application might be similar to that plastering. [On the subject of filling the interstices between the timbers, &c. with bitumen, it is curious enough that a patent should lately have been obtained, in this country, in favour of a principle, the practice of which is as old as Noah.]

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The Ark of Noah, *Gen. vi. &c.* is called *tebeh*, or *thebeh*, or *thebet*: this name is given also (and only) to the *ark* of bulrushes in which Moses was preserved, *Exod. ii. 3, 5.* It signifies a *hollow—empty—void*: meaning, it is presumed, not an *open* basket, or any other *open* receptacle, but a strictly *closed—shut up*, coffer, box, or trunk: and this idea of a *trunk* is what most accurately suits the use of it; an infant might be securely enclosed in a trunk, and a trunk would float safely on the waters. The word *thebet* I apprehend does not designate the form, but the nature of this vehicle.

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We find *Gen.* vi. 16. that the Ark was to have “ a door in the side thereof ;” for the purpose of ingress and egress : this figure shews, that such is the station of the door, in the houses of Arabia. Besides this, a window (*transparency*, literally) was made in this Ark ; “ and in a cubit shalt thou finish it above,” [literally, “ even to the supports shalt thou extend it, from the risings, or, from the elevations ;” meaning perhaps, “ it shall extend from end to end of the Ark, except where intercepted by the finishing posts, at the ends, and by those strong timbers, which running up the sides join others in the roof.”] The usual situation of the windows is seen in our Print ; and being immediately under a projecting roof, such an opening would thereby be defended from the falling rain.

The attention of the reader is further requested to the trunk-like shape of this dwelling ; which renders such an inclosure very fit to contain the infant Moses, supposing the lid, as in ordinary trunks, to be moveable.

Since then, we find in this figure of an oriental dwelling such correspondence to the *thebet*, as described by the sacred historian, we may enquire what memorials of its form and construction have been preserved in any other manner, and how they agree with that under examination.

We must at once take *Dionysius*, or *Bacchus*, for the great patriarch Noah ; and, without enlarging in proof of it here, must assume that the *Cista mystica*, or sacred allegorical chest, carried in the Dionysiac processions, commemorated the instrument of preservation, by means of which mankind had escaped destruction when involved in the calamities which accompanied the Deluge. It will be recollected, that this *thebet* has been supposed only to float, hovering over the place where it was stationed ; to be gradually (and comparatively, slowly) surrounded by the water, and to be lifted up, for a short time only, on the face of the flood, which was 22 feet in depth ; and moreover to be re-settled on its broad basis, and its projecting supports, by the earliest diminution of the retiring waves.

No. 2. In a series of pictures, representing Ceremonies in honour of Bacchus in the Antiquities of Herculaneum, Vol. II. p. 135. appears, what may be thought with great probability to be the nearest approach in form to the Noachical Ark. A woman is carrying on her shoulder a square box, having a projecting roof, and at the end of it a door. This door is a distinguishing circumstance ; for it plainly marks this receptacle as a house : it cannot be a mere box for ordinary uses, as the difficulty of putting things in, and taking them out through so narrow an aperture, sufficiently demonstrates : neither is the angular roof, with its considerable projection, analogous to the purposes of a mere box ; moreover, being carried in a commemorative procession, it is clearly a sacred *thebet*, or trunk, *i. e.* that in which Dionysius was preserved. [It has no pillars, to characterize it as a votive temple, neither is the door way proportioned to the entrance of a temple ; it rises nearly to the roof.]

To illustrate the nature of these sacred trunks, it may be proper to abstract some remarks from the notes on the volume which has furnished this subject. Oppian (*Cyneg.* iv. 253.) calls the Ark of *fir-wood* that had contained the infant Bacchus

Bacchus, and which was carried in procession by the sacred choir, *χηλον αορητην*, *Arca ineffabile*; "the most venerable Ark;" the word *chelos* is used by Homer in this signification; and both Suidas and Hesychius say, *chelos* is *Kibotos*: i. e. the Ark. Pausanias, lib. vii. says, that Vulcan made a small statue of Bacchus, and gave it to Jupiter, who gave it to Dardanus the Trojan. In the sacking of Troy the portion of Euripilus was an Ark (*λαρναξ larnax*) wherein was contained this statue; Euripilus took it away; but, at his first attempt to look into this Ark, to see the statue, he was deprived of his senses, and became insane. [Compare 1 Sam. vi. the punishment that befel the men of Bethshemesh.] Moreover the Ark was esteemed a symbol appropriate to Bacchus; and, in his processions, idols, or other mysteries of that deity were enclosed in it. The same among the Egyptians. *Clem. Alex. Strom.* v. Observe further, that the LXX. in Genesis translate *thebah*, "kibotos"; in Exodus they retain the word, *thebin*: whereas Epiphanius, Chrysostom, Theophilus of Antioch, and others, use the word *larnax*; the same as among the Gentiles described the Ark of Bacchus. The *Cista mystica* of the Bacchic rites, contained the most direct allusion to the great Progenerator of mankind; when it was not the God himself, it was the virile part of him; but, sometimes, a basket of early fruit, or seed corn, was substituted; implying, that Bacchus was the person who first taught mankind husbandry, [*Vide* on Dagon, 1 Sam. v. Plate]; and that fertility was his very character and essence.

Theocritus says, Idyll. xxvii. that Pentheus was pulled to pieces by the female Bacchantes, for prying into the sacred things which they took out of the *Cista* to place on the altars; and Catullus says, the rites of the *Cista* were celebrated in the utmost secrecy,

Pars obscura cavis celebrant orgia Cistis.

The heathen always carried the *Cista* on the shoulder; and the person who carried it was called *Kistophorus*, says Suidas. [*vide* Exod. xxv. 14. and UZZAH in CALMET.] It was the same, or nearly, with the *mystica vannus Iacchi*, of Virgil, *Geor.* i. 166.

Our next figure No. 3, is from Vol. I. of the Antiquities of Herculaneum, p. 67. It is part of an ancient picture, representing Orestes and Pylades brought for the purpose of being sacrificed, to the altar of *Diana Taurica*; but recognized by their sister Iphigenia, one of her votaries: behind the figure of Iphigenia are two attendants, one holding a sprig, bason, &c. the other doing something to a trunk which recalls very strongly the form of the *thebet*; it is longer than it is broad, and is supported at the corners by strong posts; it has a projecting roof, and this roof is rounded at the top; whereby it agrees with the Arabian house, of No. 1. This similitude is increased (accidentally no doubt) by an appearance, on the side, as if it were covered with plaster; of which a part is peeled off. The *Cista Mystica*, or somewhat equivalent, was carried in the ceremonies of Diana; also in those of Ceres, and of Isis: for, in fact, these deities differed in little more than in name;

name; and as being different characters of the same divinity. The reader will observe the close conformity of this trunk, coffer, or ark, to that of the foregoing figure; except in the shape of the roof, and the absence of a door: at least on this side of it.

On the following figures, Nos. 4, 5, 6, it is proper to state explicitly, that the extremely remarkable nature of the type, with the singularity of the legend on some of them, has, ever since their discovery and publication, been considered as justifying strong *hesitations* respecting their authenticity; nevertheless, since so many as *nine* medals are known, whose types, though greatly alike, yet differ in some particulars, it seems difficult to account for their manufacture, if they be spurious. However, we give up eight out of the nine, (three or four being absolutely condemned as forgeries, by the best judges) and restrict ourselves to that *ONE* which is admitted to be a genuine medal, No. 4. It is preserved in the cabinet of the late king of France. It has been admitted by Vaillant; and having been particularly scrutinized by the Abbé Barthelemy, at the desire of Dr. Combe, is, by that able antiquary, pronounced authentic. It bears on one side the head of Severus; on the other a double history; representing, first, two figures enclosed in an ark, or chest, sustained by very strong posts at the corners, and equally strong beams where the side joins the roof: the roof moreover is angular, like that of No. 2, and it further resembles that number, by the place of its door; which is not at the *side*, whereon are letters; but must be at the *front*, where the same two figures which we see in the ark, are represented as come out, and going away from their late residence. (Double histories are common on medals.) I say, the situation of these figures implies the situation of the door; and *that* agrees with our former instance; this medal therefore clearly commemorates an escape from the dangers of water, by means of a floating vessel. The water is conspicuous in Nos. 5, 6. Our present purpose concerning the *form* of this Ark, only, with its relation, in point of construction, to an ordinary house, we might be dispensed with from remarking the birds, one standing on the roof of this ark; the other flying towards it, carrying in its feet a sprig, apparently of olive: whether these particulars can be, without difficulty, referred to the history of Deucalion and Pyrrha, as usually understood, will be strongly doubted by all who duly contemplate the subject. Moreover, the Abbé Barthelemy informs us, that the letters on the ark are, "the letter N, followed by two or three others, of which there remain only the slightest traces; or to speak more accurately, there is nothing but the contour of the second letter to be distinguished, which according to different lights, appears sometimes an Ω (O) sometimes an E." Had the forger of the non-genuine medals met with a true one, which, having these letters well preserved, he was solicitous to copy? It is certain, that he only wanted the E to appear as the third letter, in order to justify his legend; for, "the first letter N," that seems to be unquestionable; and "there are traces of two or three others;" say of *two* others; one of which "in some lights appears to be O (Ω);" [but an E would do as well.] Accept this O, as the second letter of the inscription. The Abbé admits
traces

traces of a *third* letter; and if *any* respect be due to the forged medals, if the forger had *any* genuine original before him, which by the rarity, the singularity of its type, induced him to imitate it, (the only reason assignable for his imitation) if any *one* of the eight repudiated instances had such a prototype, then the third letter was E. It is unwise to depend too strongly on a single evidence; but it is not improper to submit, 1. that the Patriarch was known in Grecian antiquity by the name NOE; 2. that it is not impossible to explain the cause why *all* these medals, including the genuine, purport to be struck at Apamea.

Philo Judæus says, (*De Prem.* Vol. II.) "The Grecians call that person Deucalion; but the Chaldeans style him NOE (ΝΩΕ) in whose time happened the great eruption of waters." NOE is mentioned several times in the Orphic hymns; and, if any traces of his name were preserved among the eastern Greeks, as *Naus*, *Da-Naus*, *Nous*, *Mi-Nous*, &c. [which Mr. Bryant has clearly proved,] then, there is no difficulty in admitting, that at Apamea he was called *Noe*, *Noeh*, *Noue*, or *Nous*, either of which modes of spelling his name would justify this medal.

That these medals should be referred to *Apamea*, will not seem wonderful when we recollect, what we have already stated, that the LXX. translate *thebah*, "Kibotos;" the apostles do the same, *Heb.* xi. 7. 1 *Pet.* iii. 20. Now there was a city named *Kibotos*, in Phrygia, on the river Marsyas; this city was afterwards named *Apamea*, says Strabo, lib. xii. and a medal of Adrian inscribed with both names of this city, APAMEON KIBOTOS (on the river) MARSYAS, is given by *Patin*, *Num.* p. 413. *Kibotus* is not a Greek term; but apparently Oriental. Possibly a colony from the East had settled here, or, this town might value itself on preserving correctly the memorials of *Kibotos*, whence it took its name: and this the rather, as *Kibotus* signifies an Ark, or repository (coffer) for things of value. In a *Kibotos* were carried the sacred emblems, says Pausanias, lib. x. so that it was similar in nature and use to the *Cista mystica* of Dionysius; and Dionysius we have considered as a personification of Noah, to whom this *Kibotos* undoubtedly refers. Further enlargement is unnecessary in proof of the propriety of such a subject as the present on medals of Apamea; and it reduces those who refer this type to the deluge of Deucalion, to the necessity of proving, that the title *Kibotos* was, or could be, appropriated to Apamea, on account of *that* event, or of some commemoration of it, peculiar to that city.

These evidences combined lead to the conclusion that the Ark of Noah was simply a large house, whose timbers, instead of penetrating into the ground, whereby they would have been *held*, were *detached* from it, which left it loose to float, whenever the waters approached to "lift up the Ark."

We conclude by this further argument, that had the Ark been a *keeled* vessel, it would from its magnitude have drawn so much water, that it could hardly have floated where it stood; for the mountains were covered only 22 feet deep, and less can hardly be allowed for its draught of water. Many ships in the British navy draw much more; but, if the bottom were flat, then, allowing it
ten,

ten, or twelve feet depth in the water, there would still be a sufficiency of water below its bottom. This flatness of its bottom is perfectly coincident with the representations in our figures in the Plates. How greatly this flat bottom would *ease* the construction of this machine, is best understood by those who have examined the several courses of lines, and their variations, which are employed in building a keeled vessel of magnitude.

Supposing these arguments conclusive on the shape and form of the Ark, we proceed to suggest, that the form attributed to the *Cista mystica*, the memorial of the Ark, is not always that house-like [*temple-like*, if the reader pleases: for the ancient *temples* may be considered as *memoranda* of this subject]—appearance, which distinguishes our figures: ordinary baskets, of any shape, would answer the purpose, and such were usually employed; but then, it will not escape observation, how nearly basket-work represented the construction of the Ark,—by its upright stems, and its crossing withes. Without adopting Dr. GEDDES's notion, that the Ark itself was wholly of *wicker-work*,—wicker-work was certainly employed in composing those portable resemblances of it, which were designed to perpetuate its history. Medals are frequent, in which the serpent, the *good demon* is represented as entering the Ark, or coming out of it. They clearly denote the import of this sacred utensil. Nos. 7, 8.

It is possible, the reader may not *at first* perceive the propriety of attaching so great importance to the history of Noah's deliverance, and its commemoration. Our not-unlaborious investigations mark our opinion; and a little reflection will justify us. It has been long the out-cry of a certain class of *reasoners* against revelation, "Bring us FACTS WHICH ALL THE WORLD AGREE IN: FACTS ADMITTED, ESTABLISHED BY UNBIASSED EVIDENCE, &c." If, in answer to this, we adduce proof that the Christian dispensation is from above; we are reminded, "how few of mankind receive it: his own nation deny the subject of it: heathen lands refuse him." If we advert to Moses, "What! a leader of a pitiful horde of leprous slaves! at most, a legislator acknowledged by a single nation! and that a stupid nation too." Well then, to justify the assertion, that Deity *has* condescended to make known its intentions to man, examine the instance of Noah:—Was the Deluge an actual occurrence?—All mankind acknowledge it. Wherever tradition has been maintained, wherever written records are preserved, wherever commemorative ordinances have obtained, what has been their subject?—the Deluge; deliverance from destruction by a flood: the savage and the sage agree in this: North and South, East and West, relate the danger of their great ancestor from overwhelming waters,—but he was saved: and how? by personal exertion? by long supported swimming? no:—By concealment in the highest mountains? no: but by enclosure in a large floating edifice of his own construction—his own construction, for this particular purpose. But this labour was long: this was not the work of a day; he must have FOREKNOWN so astonishing an event a considerable time previous to its actual occurrence.—Whence did he receive this FOREKNOWLEDGE? Did the Earth inform him, that at twenty, thirty,

thirty, forty years' distance it would disgorge a flood?—Surely not. Did the Stars announce that they would dissolve the terrestrial atmosphere in terrific rains?—Surely not. Whence then had Noah his FOREKNOWLEDGE? Did he begin to build when the first showers descended? that was too late. Had he been accustomed to rains formerly,—why think them now of importance? Had he never seen rain,—what could induce him to provide against it? Why this year more than last year;—why last year more than the year before? These enquiries are direct: we cannot flinch from the fact: erase it from the Mosaic records; still it is recorded in Greece, in Egypt, in India: it is registered in the very *sacra* of the Pagan world; and is annually renewed by commemorative imitation, where the liberty of opinion is not fettered by prejudices derived from Hebrew institutions, or by the “sophisticated” inventions of Christianity.—Go, infidel, turn to the right hand, or to the left hand: take your choice of difficulties: disparage all mankind as fools, as willing dupes to superstitious commemoration, as leagued throughout the world to delude themselves in order to oppose you, your wisdom, your just-thinking, your love of truth, your unbiassed integrity; or allow that THIS FACT, at least, this ONE fact, has testimony abundantly sufficient to establish it; but remember, that if it be established, it implies a COMMUNICATION FROM GOD TO MAN.—Who could inform Noah? Answer this question honestly: WHO COULD INFORM NOAH? Why did not Noah provide against *Fire*?—against *Earthquakes*?—against *Explosions*? Why against a *Deluge*?—why against *Water*?—Away with subterfuge. Say frankly, “This is the dictation of Deity;” say, “Only HE who made the world, could *predict* the time, the means, the causes of this devastation; only HE could excite the hope of restoration, or suggest the method of deliverance.” Use your own language: but permit a humble believer to adopt language already recorded: “*By faith, Noah—being warned of God—of things never seen as yet—in pious fear—prepared the Ark (Kibotos) to the saving of his family—by which he condemned the world.*”—May a similar condemnation never rest on us, who must at least admit the truth of *one* text in the Bible—or be condemned by the united voice of all mankind, and by the testimony of the earth, the shattered, the disordered earth itself!!!

No apology is necessary for introducing on this Plate two subjects, which at first sight may be thought foreign from the present discussion; Nos. 9, 10. They describe the delivery of the Corinthian deity, *Palæmon*, from danger by water [a child preserved by a *Cetus*] to connect them with our subject, observe, that *Palæmon* was the *Neptune* of Corinth; 2. that Hesychius says, *Palæmon* was *Hercules*; 3. that (Hercules and) *Palæmon* was *Melicerta*; *i. e.* as Eusebius says, *Prep. lib. 1. MELEC Cartha*, “the king of the city” (Tyre), the same consequently with *Moloch*: for which *vide* our thoughts on *Baal* and *Moloch*, Plate. This, then, is the Tyrian (masculine) deity, the same with *Dag-on*, or *Seidé-un*; who is typified by a youth coming out of a fish, analogous to this child preserved by a *Cetus*. We had formerly (*Vide* FRAGMENT, No. CCXV.) occasion to
 prove,

that this fish, this boy-loving fish—the dolphin, was really a ship, or boat ; for no living fish would suffer a mast, and bowsprit, to be inserted into his back ; the same is true of this fish ; it must be *allegorical* ; because a *pine* tree, well marked and distinguished, grows out of it. What can this mean?—It means, 1. that the fish was not *living*, but a *construction* of wood ; which wood 2. was the *pine*. Now, we beg the reader to turn to observations in the EXPOSITORY INDEX on Gen. vi. 14. where he will see, the Hebrew word, *gopher*, of which the sacred historian says the ark was constructed, taken in the sense of the *pine*, understood to have been employed in forming the uprights, or quarterings, of Noah's Ark. Moreover to preserve the memory of what species of wood had been used in this construction, a crown of *pine branches* rewarded the victor in the Isthmian games, celebrated in honour of Neptune, *i. e.* Palæmon. Pines also were planted in the Stadium, and around his temples. [*Vide* the story of Semiramis hid in the pine-tree, FRAGMENT, No. CCLXXI.] The next number on our plate, offers the same representation, with a very material addition ; no less than the VERY ARK ITSELF, on which reposes the fish with the *pine-tree* issuing from its back, and the child sleeping on it in full security. Of this Ark, only the square front face is seen ; but this has a kind of foot, at the bottom of each quartering, whereon it rests, and it is divided into *upper* and *lower* stories by a cross beam. Is not this remarkably analogous to our description of the Noachical *preserver* ? Is it not almost strictly coincident ? The roof indeed, is flat, for were it angular, it would not admit the situation of the dolphin. But, without pushing this argument further, it results, that the fish is a *symbol* of the preserving Ark—in construction of which the *pine*, was the wood understood to be employed. Nor is this all : we said [*vide*, 1 Sam. v. Plate] on the deity *Dagon*,—(the same as *Palæmon*, *q. PALÆ* (*i. e.* *old*) *M'AUN*, “the *ancient AUN* :” a very expressive name) that when the *symbolical fish* was employed, it were too much to expect a representation of the Ark also ; yet, this medal presents both ark and fish ; contrary, most certainly, to every rule of Allegory, yet not the less applicable to our illustration of the original history :—for if we combine these ideas ; —the fish—the ark—the pine tree, and—the child ; what do they express, but—a deliverance from extreme danger by waters ; nay, even a renewal of life, by means of a floating preserver?—And what else is our explanation of *Dagon* ?

* * * See these ideas more fully stated on the Plate of Corinth, in SACRED GEOGRAPHY.

No. 11. Venus, *i. e.* the prolific power, receiving an infant from a dolphin, which has preserved it from the waters. See the very same idea in the Plate of *Dagon*, No. 3.

No. 12. A square chest, or Ark (*Kibotos*) with the *pine-tree* issuing from it—as before from the fish, proving, that the fish and the ark are of the same emblematical import, or character ; and may freely be substituted one for the other.

These medals are all from Vaillant's *Coins of the Colonies*.

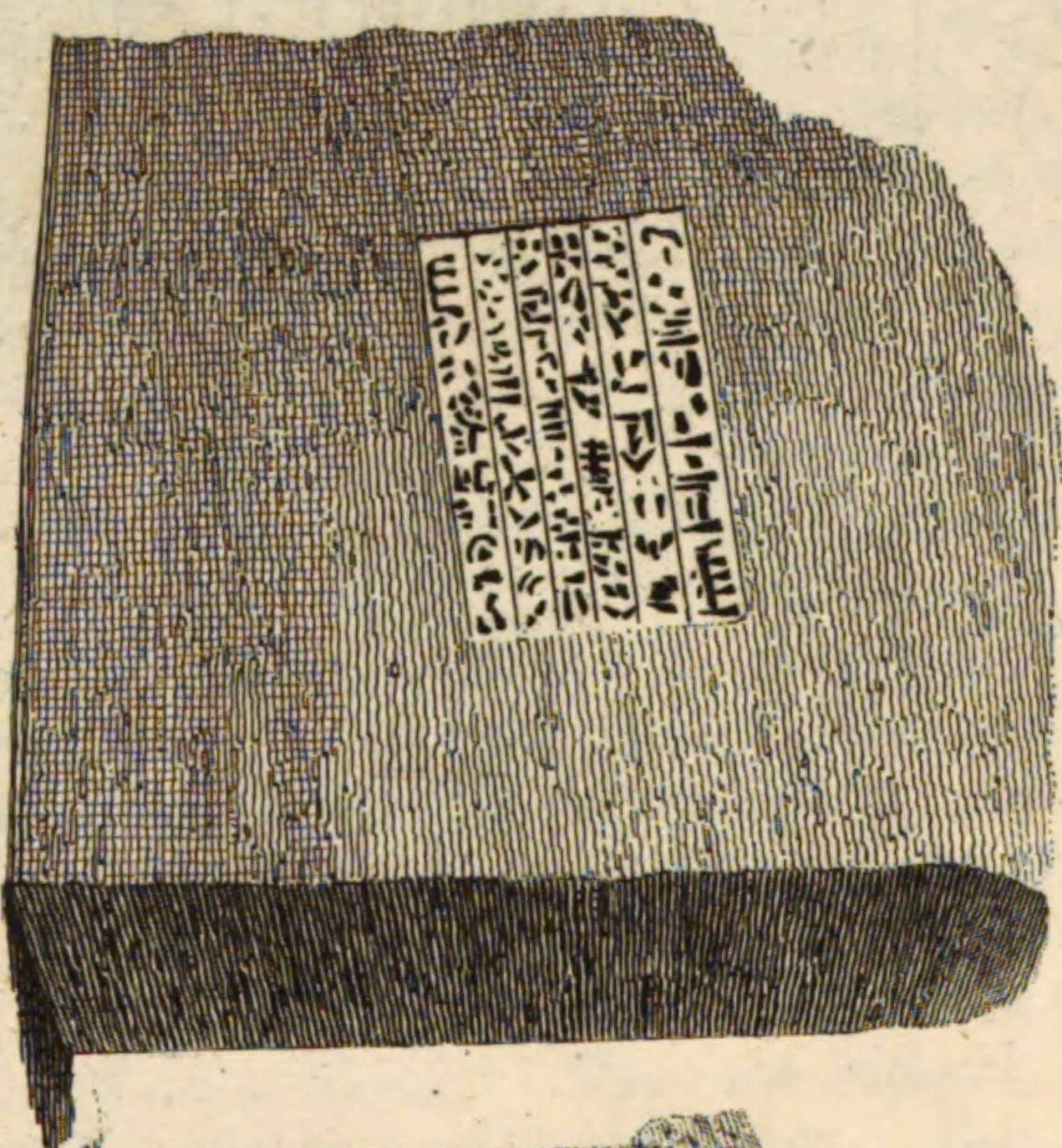
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EARLY
WRITING
Genesis Chap. XI.

THE HISTORY OF THE BABEL TOWER

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It would be deviating too much from our purpose to detail the mode of procuring these bricks; therefore taking for granted that they are authentic and genuine, we shall compare what we know of them with the Mosiac account of what seems to be their history.

Moses tells us, Gen. xi. 3. that mankind journeyed from the East;—they found a plain in the land of Shinar, and settled there;—and they said one to another, 1, let us make brick; and 2, burn them thoroughly; and 3, they had brick instead of 4, stone; 5, and slime they had for mortar. They afterwards proposed to build a city and a tower, in later ages called Babel, and Babylon.

The first question is the situation of the place. On the river Euphrates, about three miles above the present city of Hillah, an island one mile or so long of earth presents itself, so large that it has usually been mistaken for a hill, and this the rather, as trees of various kinds, and some of great magnitude grow on it. At the foot of this hill, and round about it, are numerous ruins of edifices, composed of two sorts of brick, one, the common sort of the country, hardened by having been dried in the sun; the other hardened by being baked in the kiln. Those which are only sun-dried, are placed in the interior and less noticeable parts of the structures; and those which are baked, are placed wherever a better appearance or more solid construction was desired. Bricks of this kind are now, from time to time, fetched away in carts, for use in the country around. According to the Mosiac history, there being no quarries within view of Babel, the builders of that edifice, used brick instead of stone, which, by

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THOUGHTS ON THE SUBJECT OF EARLY WRITING,

AS IMPLIED IN THE INSCRIPTIONS ON THE BRICKS FOUND
IN THE RUINS OF ANCIENT BABYLON.

THE attention and curiosity of the public have lately been strongly excited towards an article which connects very intimately with part of the historical records of Holy Scripture; I mean those bricks found on the spot where it has been supposed with the greatest probability that the Tower of Babel, or at least some part of ancient Babylon, formerly stood. Several of these bricks have been brought to London, under the direction of the East India Company. We are the more interested on this occasion, inasmuch as there is every inducement to conclude that by the providence of God, various confirmations of historical parts of the sacred writings, are extant although not usually adverted to: these, when properly considered, add strong collateral evidence in establishment of the facts presented in the Bible; not only so, they also enable us to understand the terms employed in the Bible accounts of such events with infinitely superior correctness.

It would be deviating too much from our purpose to detail the mode of procuring these bricks; therefore taking for granted that they are authentic and genuine, we shall compare what we know of them with the Mosaic account of what seems to be their history.

Moses tells us, Gen. xi. 3. that mankind journeyed from the East;—they found a plain in the land of Shinar,—and settled there;—and they said one to another, 1, let us make brick; and 2, burn them thoroughly; and 3, they had brick instead of 4, stone; 5, and slime they had for mortar. They afterwards proposed to build a city and a tower, in later ages called *Babel*, and *Babylon*.

The first question is the situation of the place. On the river Euphrates, about three miles above the present city of Hillah, an immense mass or mound of earth presents itself, so large that it has usually been mistaken for a hill; and this the rather, as trees of various kinds, and some of great magnitude, grow on it. At the foot of this hill, and round about it, are remains of vast edifices, composed of two sorts of brick; one, the common sort of the country, hardened by having been dried in the sun; the other hardened by having been baked in the kiln. Those which are only sun-dried, are placed in the interior and less noticeable parts of the structure; and those which are baked, are placed wherever a better appearance or more solid construction was desired. Bricks of this kind are now, from time to time, fetched away in carts, &c. and are used for the purposes of building, in the country around. Thus, according to the Mosaic history, there being no quarries within easy reach of Babel, the builders of that edifice, used brick instead of stone; which, for

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so large and magnificent an edifice, is extremely remarkable, such structures being usually of the most costly materials.

The second article is, that whereas bricks are usually bound together by mortar, when combined in building, these bricks are bound together by *bitumen* (the *slime* of our translation). The word in the Hebrew is occasionally rendered *pitch*, but should be *bitumen*; as when the mother of Moses *pitched* his ark, &c. because, *pitch* being a production from the pine tree, a native of cold climates, as Norway, &c. no *pitch* could be obtained where no such tree grew; but bitumen is a natural production, rising from the earth, and flowing into what is called *pits*; whence it is procured by labour. Those pits which furnished the bitumen employed at Babel, in addition to what the country yielded on the spot, which might be considerable, are situated at the town of HIT or IR, about six or eight days journey up the river; so that it was easily floated down to Babylon by the stream. The courses of bricks, at present extant, are laid in bitumen, such as the pits above mentioned supply; and every four or five courses of bricks has also a layer of reeds between the bricks: of these Moses makes no mention but they seem to imply that marshes, &c. had prevailed hereabouts at the time when these reeds were so employed. This narration therefore of Sacred History is completely justified by the actual situation and construction of the buildings alluded to, though at present in ruins.

After this slight sketch, by way of introduction, we come to the bricks themselves. They have been exhibited before the Royal and Antiquary Societies, &c. also at Sir JOSEPH BANKS's, in London. They are composed of a yellowish clay, somewhat redder in the center; they are three inches thick, and in length and breadth rather exceed twelve inches; so that they resemble that kind of brick called among us, (I think) "paving tiles," or "twelve-inch tiles." This should seem to decide the question, whether anciently men were larger in dimensions than they are at present, since no doubt the same considerations of readiness for being held in the hand, of being placed, &c. and of weight, &c. were then attended to, as now: the inference is that the builders of Babel, though robust and active men, yet were but equal in personal powers to the same laborious class of mankind in the present day.

But the most extraordinary part of these bricks is, that *impressed on them* is a series of characters, in several lines, evidently struck while the clay was wet. This discovery is of great consequence to us, as biblical students; because, many Christian divines have held, that writing was communicated by God to Moses, when on Mount Sinai, and this has lately been strongly insisted on. Moses indeed does not intimate this; rather, on the contrary, by mentioning a particular species of writing, "like the engraving on a seal," he distinguishes, by reference to an art well known, and practised in several manners. The Editor of CALMET has supposed, that the seal given to Tamar by Judah, was *inscribed*; and that the purchase deeds of Abraham needed but a few

a few technical *to have and to hold's* to render them creditable to a modern proficient in the art of filling a sheet handsomely. Now if writing were known in the days of Abraham, if it were also known to the builders of Babel, the practice of it approaches so nearly to the Antediluvian ages, that it suggests a very interesting question, whether it was not known also before the flood? For there is no mention of any incident between the flood and Babel, which was likely to be its origin; and if writing were practised before the flood, there is no difficulty in the inference, that Noah was acquainted with it, and would preserve it, as an art too valuable, too important to be lost. This, if admitted, cuts off at once all those traditionary conveyances of divine truth, which some have imagined, from Adam to Moses, thereby leaving the principles of that truth exposed to the variations and perversions to which tradition is always liable. But, if divine truths, divine worship, divine knowledge, were preserved by writing, then those distinguished patriarchs, Shem, Abraham, Jacob, Joseph, Moses, &c. had like ourselves, authentic *memoranda* to guide their faith; the ancient promises, once registered, might descend to them, and from them to us, *verbatim* as delivered; and in short it may be inferred generally that they also had permanent memoirs which instructed them completely on the subject of past events, and guided their confidence in future expectations. If they had writing, they had divine books, comments too, no doubt, and thus they were capable of knowing perfectly the references of their services, their sacrifices, their hymns, their music, &c. and of performing their sacred rites with the same solemnity and interest, as men of God in later ages, David, Solomon, or the prophets.

This subject leads to the inference that the Antediluvians enjoyed fuller means of grace than we are aware of. In the days of Enoch "men began to call on the name of Jehovah," in a manner perhaps more solemn, more united as communities than before. Perhaps the Holy Scriptures, then extant, were publicly read to them; perhaps Enoch left in writing his prophecy of the coming of the Lord with ten thousand of his saints; perhaps Noah was a preacher of righteousness by other ways than by personal admonition; and perhaps too the sons of violence, on whose account the waters of the flood overwhelmed the earth, were warned, were entreated, were adjured,—by the most effectual remonstrances,—by remonstrances calculated for the most salutary effects.

Such are the consequences of admitting that the bricks now shewn are those of the *original* tower of Babel; but in fact this tower had, as it were, *two* origins; one soon after the flood, when the foundations were laid, and the superstructure was advanced; but the scheme was not completed according to the primary intention of its builders, owing to those dissensions among them which produced their confusion and dispersion. The second origin of this tower, to which it is *possible* these bricks may be referred, was when
Nebuchadnezzar

Nebuchadnezzar undertook to finish it, being intent on rendering Babylon the seat of his glory. A question therefore arises, whether these inscriptions might not be struck at this latter time, this re-edification? The answer depends on ascertaining in what part of the building they are found; if in the foundations of the tower, then no doubt they are of great antiquity; if on the superficies and *finishings*, then they may be of later date. It appears that, "to come at the bricks, *it is necessary to dig into the earth*;" the relator also seems to mention walls level with the bed of the river, as well as perpendicular to it in their course, and "*subterraneous canals*." Moreover, I suppose, we ought to distinguish between the *tower*, which was raised to a certain height by the original undertakers of the work; and the *city*, which perhaps was little, if at all inhabited. Moses includes in the scheme of the builders, both a city and a tower: that the tower was in some respects finished, is certain from the astronomical observations made there; and long after examined by desire of Aristotle. The earliest date of those observations nearly coincides with the Chronology of the Mosaic history, as applicable to this tower. [I think the difference is less than 50 years.]

Eastern tradition universally attributes the use of letters to the antediluvian ages: it may be presumed that the notion has some foundation; for there seems to be no cause why those who could invent certain arts mentioned by Moses, might not invent that of writing also. The testimony of Josephus too, inclines to this side of the question.

Assuming for the present that this writing is of deep antiquity, we proceed to remark, that it is one simple element, wholly composed of a single point, like a nail, or the head of an arrow, variously combined: in fact, it has been called "the nail-headed character;" and it seems to be as a character, a very simple thought, but of very arbitrary application. The next question is, whether each combination expresses a complete word? and the third is, the manner of reading it, whether it should be read from the left hand to the right?—like our own writing;—from right to left,—like the ancient Hebrew, &c. or— from top to bottom, like the Chinese.

Nil desperandum is an excellent maxim; and as the course of knowledge is progressive from thought to thought, the reader may excuse a digression containing a hint on this subject, which another may improve, and a successor may complete,

The plate contains a collection of characters so closely resembling those on the bricks, that they may fairly be taken for the same, at least as to their principle; these (as delineated on the spot, by LE BRUYN) are copied from the ruins of Persepolis; or at least from what is understood to have been a palace of the ancient Persian kings; and the application of these may reflect some kind of light on the nature of the former, from which, according to appearances, they are more or less distant transcripts.

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To determine the manner of reading these characters, consult No. 1, containing a view of these inscriptions; these are evidently to be read *horizontally*, since such is their situation in the wall. Now a public inscription in a wall would be useless, unless posited as meant to be read. These are clear instances; an instance equally clear is No. 2, containing three inscriptions laid *horizontally*, inside of the portico. One of these inscriptions given at large in No. 3, appears to be beyond a doubt *horizontal*; as in fact are all introduced by LE BRUYN, except as noticed hereafter.

It is further to be remarked that the beginning of the inscription No. 8, must be at the left hand; because, every line commences *full* and *even* on this side; but no two lines end at corresponding points; this irregularity must mark the termination, not the commencement of the lines. This leads also to a conjecture, that these inscriptions are poetry: had they been prose it would naturally have filled up each line, and the sense would have been carried to a following line, whereas poetry would admit only so many words in any one line as completed the sense intended, and each line must begin afresh for the sense it included. The blank spaces, therefore, at the end of each line, being dissimilar, support the inference, that the writing is controuled in its dimensions by poetical measures. This precisely accords with the custom of the East; and, that poetry was practised before the flood, appears from that instance of it, which Moses has preserved in the address of Lamech to his wives Adah and Zillah. No. 4, may serve to confirm this conjecture: it shews the endings of the lines in another inscription. In this example, also, the lines begin in a determinate manner, but end with considerable variations. The same is the fact with respect to the others.

There is yet another remarkable application of these characters, shewn in No. 5; *i. e.* that they range not only along the tops of these windows, but down their sides; and not entirely down their sides, whereby it might be suspected that they commenced at the bottom; but they clearly commence from the top, and take their course downwards. One of these, of the actual size, is given in No. 6. This may be taken as an indication that they are not signs of syllables, or mere letters, since letters would not be written *singly* down a wall; but they are complete sounds, and combinations of sounds; *i. e.* words, or signs of ideas; therefore, each by itself is expressive, and according to the order of their course is the current of the information they contain. The general result of the speculation is, that this character is extremely simple in its form, and is varied in its sounds, inflections, and powers, by its position: that it is to be read *horizontally*; from the left hand to the right; and that it denotes words, not syllables.

The close of these hints should inquire the probability of our expectations, or hopes, of reading this character. The testimonies adduced imply undoubtedly that it was legible, and also well understood at the time when Persepolis was

was built. If this palace dates from Cyrus, it affords a gleam of hope, that the memory of what was popular in the days of that sovereign may have survived, since we have writings of a much older date; witness Moses and David, with many of the prophets, to say nothing of ancient Greek writings. If the date of Persepolis be referred to the Persian kings, known by the name of the Arsacidæ, as some incline, it may justify expectation, that what was intelligible long after Alexander, will have been preserved by some good fortune or other; and as we now read many alphabets, such as the [East Indian Sanscrit] Palmyrene, Phenician, &c. which fifty or sixty years ago were totally unknown to our learned men, and the information they contain was almost hopelessly shut up from us,—so it should seem to be far from desperate, that the inscriptions at Babylon, by means of those at Persepolis, may be decyphered, and restored to mankind.

It may be serving some inquirer to add; that in the seventeenth volume of the Philosophical Transactions, there is a plate of inscriptions copied from Persepolis, with some Arabic writing, which has greatly the air of a derivation from the arrow-headed character. See an attempt to illustrate this in our Plate of Baal and Moloch, on Amos v. 26.

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Having attended to the immediate subject of this inquiry, it may not be amiss to hint at what information, in respect to the science of communicating ideas by signs, (*i. e.* writing) may be gathered from ancient authors. The ancients in general referred every excellent thing, of which they could not discover the origin, to “the Gods:” and if we properly understand their words, they were right in this reference. “The Gods,” in the language of deep antiquity, did not mean so much the deities, or supreme celestial powers, as those great patriarchs to whom, out of a fond and overweening respect, after-ages attributed divinity; human personages promoted, as it were, to be Gods, and venerated as such by their descendants. On this principle the first Gods we know, or can know, are the patriarchs Noah, and his sons Shem, Ham, and Japhet: our inference is, that to refer writing to “the Gods,” is to ascribe the practice of it to the second progenitors of mankind.

If we examine this notion more closely, we shall find that each tribe of descendants claimed its respective head as the author of this art. The Hebrews speak of Shem as a teacher, who taught religion, &c. to Isaac, son of Abraham; and the Egyptians claim for Ham, or at least for his son *Thoth*, the honour of instructing them in religious rites, and of inscribing historic *memoranda*, on pillars of stone, or masses of clay, *i. e.* *terra cotta*.

It is probable that the reader may admit this idea in the instance of the patriarch Shem, without difficulty, but the evidence for the practice of this art among Gentle nations requires somewhat further elucidation.

Plato (in *Phædro*) expressly attributes the invention (practice?) of letters to the

the Egyptian *Thoth*, the *Hermes*, or *Mercurius Trismegistus* [thrice-great] of the Greeks; but *Thoth* is understood to have been assistant and secretary to his father Mizraim, and Mizraim was son of Ham. [Vide Diod. Sicul. lib. 1. cap. 8. 35. Euseb. Prep. Ev. p. 36.] But, whence did Thoth receive these letters?—for I take for granted that he did not invent them. Some authors attribute the invention of letters to the country of *Syria*, as Diodorus Siculus, lib. v. cap. 43. reports, who says, “as to those who affirm that the *Syrians* are the inventors of the letters which they transmitted to the Phenicians, who brought them into Greece with Cadmus,—it is replied, that the *Syrians* did not really *invent* letters, but only varied the forms of some of their characters.” This disagreement may be reconciled, by remarking, that ancient authors did not always correctly distinguish between *Syria* and *Assyria*; so that it may be very true that the *Syrians* only changed the forms of letters, while the *Assyrians* may have invented them: and this clears the sense of the passage; for, how should the *Syrians* transmit letters to the Phenicians?—were not the Phenicians themselves *Syrians*? But, understand *Assyrians*, and all is right; moreover, thus understood, there is no contradiction between Diodorus and Pliny, who says, lib. vii. cap. 56. “*Literas SEMPER arbitrior Assyrias fuisse; sed alii apud Egyptios à Mercurio, alii apud Syros repertas volunt.*”—Letters were ALWAYS, [*i. e.* from the earliest ages] extant in Assyria, as I have thought; though some refer the invention of them to the Egyptian Mercury [the *Thoth* we mentioned above]; others to the *Syrians*: *i. e.* the Phenicians, as appears from what follows. I think, therefore, that we only accompany the current of evidence, when we infer, that Thoth, in Egypt, received the knowledge of letters from Assyria, where they had ALWAYS been extant, says Pliny; and this leads us to ascribe to them at least as early a date as the building of Babel, in Assyria; since Thoth and Mizraim must have been contemporaries with the undertakers of that edifice: and thus we are brought again to “the Gods,” *i. e.* the early or second fathers of the human race.

There is yet another thought to be added: We are informed that *Thoth* wrote inscriptions on *pillars*,—no doubt of stone; but others say of clay, *i. e.* meaning, some pillars were of stone, others were of clay hardened in the fire; and this, if it were proved [but the circumstance can only be glanced at here], would probably be found to be the very same procedure as that to which our Babylonian bricks have been subjected; that is to say, an impression made [stamped?] on the clay while moist, and rendered permanent by induration of the brick. I shall only refer to one author on this article at present. Eusebius, in *Chron.* says, “The Remains, or Records of *Thyoth* [Thoth] were inscriptions on *pillars* [ΣΤΗΛΩΝ, ἱερὰ διαλεκτῶ καὶ ἱερογραφικοῖς γράμμασι πεχαγρακτισμένων] written upon in the sacred language, and in sacred characters; and Agathodemon translated them, out of the sacred lan-
guage

guage into the Greek tongue, in sacred letters." These pillars were in caves, &c. i. e. temples, in rocks, grottoes, &c. places at once sacred and secure; such as are now extant in India.

It may be thought a desperate undertaking to attempt the defence of a passage in *Josephus, Antiquities, lib. 1. cap. 2.* which has usually been treated as no better than fabulous by learned men: He says, "*The posterity of Seth, having been forewarned of the deluge, erected two columns [ΣΤΗΛΩΝ,] one of stone, the other of brick, on which they recorded their discoveries in astronomy, &c. The column of stone is still extant in the land of Seirath, or Syrias.*"

Observe 1, this conduct before the flood was exactly the counterpart to that of Thoth after the flood, who wrote on pillars of brick and stone; it therefore is by no means incredible as a matter of fact. 2. The ancients having confounded very frequently the names *Syriad, Syrias, with Assyria;* understand this *Seirath* or *Syrias* of Josephus, as denoting *Assyria*, and this will agree with what Manetho relates, *apud Euseb. & Syncell,* that "*Thoth had engraved sacred characters on columns erected in Syriad:*" understand *Assyria* here also, and the evidence of letters being (SEMPER, as Pliny speaks) ALWAYS extant in Assyria, is greatly confirmed. 3. In our history of the Deluge in *loc.* we assumed principles perfectly consistent with the preservation of columns of stone, or brick, during that great catastrophe; nay, it implies no impossibility that temples, excavations cut in rocky mountains or natural caves high up in the mountains, of which the East contains many, [some, which are better known to general readers, are extant in Egypt,] might survive it; and were it true, that the celestial observations, recorded on their ceilings, referred to an antediluvian state of the heavens, let no one fear for the divine authority of Moses, but only endeavour correctly to understand his narration. Lastly, by taking, *Syrias, Seirath, Assyria, &c.* for countries still further east than that usually called Assyria, we may come to those designed by Diodorus and Pliny, as well as by Josephus and Manetho; for there are actually extant recesses, grottoes, &c. i. e. temples with devices, which, perhaps, when examined, may prove *historical*, and for aught that appears to the contrary, may have even survived the deluge, in the land of the first establishment, and the after resettlement, of mankind: such is the language of tradition respecting them, and such *may* be their character, though we cannot at present prove it, for want of sufficient information and documents.

It will be recollected, that this can be only a sketch—a mere occasional sketch, on the subject of the antiquity of writing; an extensive dissertation, might press into the service, the assertions of the Jews, that certain of the psalms were written by Adam, by Enoch, &c.—the traditions, &c. of the East, as to the numerous volumes written by the antediluvian patriarchs; the remark that the poetry of Lamech could no way be so well preserved as by writing; with many other hints and inferences, which on this occasion must of necessity be suppressed.

ATTEMPTS TO ILLUSTRATE THE HISTORY OF MELCHIZEDEK, AND TO DETERMINE HIS PERSON AND DIGNITY.

[For the Plate, see Map of the Situation of PARADISE; on Genesis, ii. 8.]

THE Reader will observe in various parts of this work, that we have hinted pretty strongly at the propriety, rather perhaps, the necessity, of placing the province of *Kedem* very far east in Persia; indeed, at the eastern extremity of that empire. We beg him now to turn to the Map of the "Situation of Paradise," Gen. ii. where he will find the Paradise of the Bramins, marked by a circle, at no great distance from the province of *Mauber el Nahr*, (or, "beyond the river,") from whence, as we are told by Joshua, the original stock of the Hebrew nation came. [Vide on the "Map of Geographical Illustrations:" *init.* Acts xxviii.] If we take a *Caucasian* mountain, for the Mount *Ararat* of Scripture, where the Ark rested, and consider the necessary progress of inhabitants to the countries west of those mountains, we shall find that a considerable portion of mankind, at various times, probably during several ages, had been accustomed to migrate from thence toward Syria and Egypt. It will then be no wonder, if the fathers of the Hebrew nation were included among them. Abraham himself did no more than was done by multitudes before him; than was daily accomplished, as he well knew: when the proper time was come, he also, as they had done, quitted the place of his birth and primary settlement, to inhabit a country, where he also should be the founder of a dominion. We are sure then, that Abraham was not the first who left *Kedem* in expectation of future settlement;—nor, in all probability, was he the last: he did what he had seen others do, and others did what they had seen him do. But, we know that he had authority, Divine authority, under which he acted,—we shall beg leave to say, communicated to him, by means of the great patriarch *Shem*; his venerated ancestor, who also visited the same country to which Abraham had been directed by his authoritative prediction.

The object of the following hints, is to prove that *Shem* quitted *Kedem*, to travel west; that he actually came into the west, and that he was there known under the name of the "King of Peace," or of *Melchizedek*; and that, to this patriarch, belongs what is said in Scripture, in reference to that "Priest of the Most High God." The progress of *Shem*, westward, need not detain us; in fact, there is historical evidence of it, but we rather infer it from the same evidence as proves him to be the person known under the name or character of *Melchizedek*, who was established, as is admitted, in the countries adjacent to the Levant. It is necessary to collect what has been reported of this august personage; and to justify its application, in the manner in which we mean to apply it.

The first place is due to an attempt to combine the scattered rays of tradition, which are, for the most part, collected under the article *MELCHIZEDEK*, in *CALMET'S DICTIONARY OF THE BIBLE*.

A

FIRST

GENESIS, xiv. 17.

FIRST TRADITION.

Epiphanius tells us, that the whole land of Canaan, fell to the posterity of Shem, according to a division made by Noah, himself; the posterity of Shem enjoyed it a long time, but were dispossessed by the posterity of Ham:—[so far we consider this tradition to be correct; and it is partly supported by the promise made as we have supposed, by Shem to Abraham, in the name of God, that he would multiply him into a great nation, in a country subject to his jurisdiction, and authority. The following part of this tradition we shall reconsider hereafter.]—Those kings who had subdued the kings of the Plain, and kept them in subjection during twelve years, were the descendants of Shem; and had only ruled, as they were justly entitled to do, over the intrusive sons of Ham. See also *Jarchi*, in Gen. xli. 6. fol. 13. p. 2. col. 2.

SECOND TRADITION. PARENTS OF MELCHIZEDEK.

1. The *father* of Melchizedek was the *Sun*; the *mother* of Melchizedek was the *Moon*. *Epiphanius, Heres.* Tom. I. p. 468.
2. The father of Melchizedek was *Eraclas*; the mother of Melchizedek was *Asteria*, or *Astaroth*, ib. iv. 2.
3. Melchizedek was born of unclean parents. *Jud. quid, ap. Sixt. Senens.* lib. v. Annot. 90.
4. Melchizedek is “without genealogy,” because the earth had opened its mouth, and had swallowed up all his relations; says *Athanasius. Epiph. Heres.* lv. p. 472.; lxvii. p. 711.

SCRIPTURE HISTORY OF MELCHIZEDEK.

Gen. xiv. 17. “And the king of Sodom went out, [from whence? certainly from a place where he had taken refuge: was this place *Salem*?] to meet Abraham, on occasion of his joyful and triumphant return after his victory over Chedorlaomer, and the kings who were with him:—the king of Sodom went out to the valley of SHAVEH [the valley of *equalizing*] THAT emphatically called, THE KING’S VALLEY. And Melchizedek king of *Salem*, brought out [the same word in its root, as that used respecting the king of Sodom,] from his royal residence, no doubt, *i. e. Salem*, bread and wine. Now, he himself, emphatically, was Priest of the Most High God. And he blessed him—Abraham; and he—Abraham—gave to him—Melchizedek—for consecration, or sacred uses, tithes of all which he, or his people, had taken from their enemies.

Psalms cx. Jehovah hath sworn, and will not retract: be thou the priest to perpetuity, on my appointment, according to the manner—the Order, of Melchizedek.

Heb.

Heb. v. 10. Thou art a Priest in perpetuity, according to the Order of the priesthood of *Melchizedek*, who, in the days of his flesh, applied himself with prayers and supplications, to the Power that could deliver him from death; with strong, efficacious, cryings and tears; and was graciously heard. By reason of his piety, his filial piety, he exemplified obedience. [So the Syriac version reads this passage.] Now this *Melchizedek*, king of Salem, Priest of the Most High God, who met Abraham returning from the slaughter of the kings, and blessed him: to whom, also, Abraham gave a tenth part of his spoils, being first, by interpretation, KING OF JUSTICE, or righteousness; and then again KING OF PEACE: *ἀπατωρ*, fatherless; *αμητωρ*, motherless; pedigree-less, genealogy-less, having neither beginning of days, nor end of life; but assimilated to the Son of God: continues a priest perpetually.—Now consider what a great personage this was! to whom our father Abraham himself, of whose greatness we are nationally so fond, gave the tenth of all his spoils—and who received them by right of office and dignity. *Levi*, who in the Jewish establishment receives tithes, paid tithes on this occasion. And *Melchizedek*, who has no right by [Levitical, or other priestly] pedigree, not only received tithes, but exercised the most solemn part of the priestly office, by giving an authoritative benediction to Abraham; as being unquestionably Abraham's superior. Now, in the Levitical priesthood, men who are well known to be mortal, receive tithes; but, in that Order of priesthood, he received tithes of whom it is witnessed—believed on general and allowed report, that he is now living.

From these allusions to the life of *Melchizedek*, we learn, 1. That he had undergone deep distresses; had implored the Preserving Power to interfere on his behalf; and had been heard. 2. That he had exemplified great piety and obedience. 3. That he was not a priest by regular official descent, *i. e.* not by birth; but he enjoyed his office by appointment. 4. That he was a King. 5. That the Levitical priesthood is very inferior to his; as, 1. It is comparatively modern. 2. It has not equal dignity, wanting royalty. 3. It often changes hands; and sometimes is held by persons not very holy. It extends only to a single small nation: and does not so much as assume to officiate for mankind in general.

We may now endeavour to shew how far these particulars coalesce in the person to whom we have referred them.

The FIRST TRADITION says, "Canaan fell to the lot of Shem." In FRAGMENT, No. xix. p. 37. we read, that *Satyavarman* (Noah) gave Japhet the North of the Snowy Mountains; and to Shem he gave the South. Now certainly, both these patriarchs had the East and West, as inspection of the Map will readily determine; since Europe itself, the acknowledged residence of Japhet's posterity, is west of Caucasus. Canaan therefore, though west, yet being south of the latitude of Caucasus, (Japhet's allotment being north) fell to the share of Shem.

Of the traditions which respect the parents of *Melchizedek*, the first and second are the same; for *Eraclas*, the antient *Ercles*, or *Hercules*, was beyond all doubt,

the Sun; but so many later personages assumed, or received, this glorious title, that the original application of it, escaped even the learned; and certainly the person whom it primarily denoted, was utterly unknown to the generality of those who adored him: even *Cicero* “wishes they could tell which *Hercules* it was whom they worshipped.” *Macrobius* tells us expressly, so does *Nonnus*, and so does *Plutarch*, long before, that the *Bel* of Babylon, the *Con* of Egypt, the *Apollo* of Greece, and, in fact, all the deities of the Heathen, terminated in the Sun, or *Helios*.

But the reader may observe, that we refer these divinities to a person, no less than to a power: and many things said in reference to one of these distinctions, are true of that distinction, only; but may not be applied to *either* indiscriminately. A hint or two may prove that *Helios* is not, restrictively, the solar body.

1. *Helios* was said to have traversed the vast ocean in a boat, which *Oceanus* lent him. [But, this can be true of a person only; not of the orb of day.]

2. *Porphyry*, *apud Euseb. P. E. lib. iii.* says, the Egyptians, to describe *Helios*, represented a man in a float or ship, supported by a crocodile.

3. *Jamblichus* says “the emblem of *Helios*, was a man on a lotus, in the midst of the water; and a woman on a lotus, was *Selene*,” (the Moon.) Now the lotus was emblematical of preservation from a flood; because, in the inundation of the Nile, the broad leaf of this plant rises with the water, and never is overwhelmed—never is *drowned*. Hence the Egyptians placed *Helios* on a lotus in the water; and reported, that he arose on this plant in the form of a newly-born child. [Vide the medals on the plate of Noah’s ark, and their explanation. *Gen. vi.*] These particulars identify *Helios* with Noah; and thereby ascertain the true father of *Melchizedek*, i. e. *Shem*, in that great restorer of the human race.

The mother of *Shem* was, 1. The Moon. 2. *Asteria*, or *Astaroth*. It is unnecessary to prove that *Astaroth* is the Moon. It is admitted. We have seen that *Selene* is the Moon on the lotus, in conjunction with *Helios*. The crescent typified the ark, the “receptacle of mankind;” hence it was worn by *Isis*, &c. In short, this particular so naturally follows the former, as to need no enlargement.

These traditions, then, mutually confirm each other: it is true, they have been so disguised under the allegories of mythology, that the learned, startled by their uncouth appearance, have rejected them, at first sight, without concerning themselves to penetrate into their true meaning, or to determine their true reference. Nevertheless, they have undoubtedly preserved the memorial of an undeniable fact.

Melchizedek, say the Jews, in our third tradition, was born of “unclean parents.”—I do not see how this affects his natural descent; but if referred to his priesthood, to which he derived no claim from his birthright, there is reason to think that the notion is correct; though extremely uncouthly expressed: he

he was certainly deficient in the Levitical requisitions of birth and parentage. . . . *Athanasius* says, "The earth had opened her mouth, and had swallowed up all his relations:" why then, he must be either Noah, Shem, Ham, or Japhet. Noah, he certainly was not: Japhet was established too far north; that Melchizedek should be Japhet, is unlikely in the highest degree: Ham he *might* be, but very feeble reasons are those which support his pretensions; his character is utterly incompatible with the dignity, both royal, and sacerdotal, of this illustrious comparison to Jesus Christ. It follows, that *Shem* is the only remaining personage, to whom we must look; and this tradition, thus understood, corroborates reasonings already stated; and is augmented to certainty by those shortly to be submitted to the reader.

We turn now to the BIBLE HISTORY of SHEM, who was, we know, a person of conspicuous piety AFTER the deluge, witness his behaviour to his father, Noah, when Ham, his brother had exposed, and abused their common parent. Most probably, therefore, the same pious disposition marked his character BEFORE that catastrophe: his name, imposed, apparently prior to that event, signifies *settled, steady*; and, as Noah was "a preacher of righteousness" to the Antediluvians, we may think the same of his son Shem, who succeeded in the priesthood.

That dreadful event which was coming on the earth, was certainly foretold to Noah; and if to Noah to Shem, who also assisted in the preparation of the ark. Deeply imbued with piety, and eminent for sedateness, he could not but look forward with apprehension; and every thing warrants the conclusion, that both Noah and his son would deprecate and deplore the judgment they awaited. In other words—the piety of Shem prompted him, under these trying circumstances, to address with prayers and supplications, and strong cryings and tears, that Celestial Power which was able to save him from death—in which this Patriarch was the counterpart of our Lord Jesus; who, foreseeing his descent into the silent tomb (as Shem foresaw his inclosure in the floating tomb of the ark,) prayed, "if it were possible let this cup pass from me;"—but, in the issue, as Shem in obedience to the divine injunction entered the ark, so did Jesus enter the grave:—"nevertheless, not my will, but thine be done." Shem was saved, and revived:—so was Jesus; one from the ark, the other from the sepulchre.

We have elsewhere [vide FRAGMENT, No. clv. p. 104.] explained the allusion of the apostle Peter to the Ark of Noah, in reference to the death of Jesus; and now we find the apostle Paul alluding to the same event, and with the same intention. Add to this, the time which Shem lay enclosed in his ark; part of one year, the whole of the second year, and part of a third: to complete the comparison to Jesus, who (like Jonah in the sea,) lay part of one day, the whole of the second day, and part of the third day, in the heart of the earth.

The Ark it is understood, discharged its inhabitants on the mountains of *Caucasus*; from whence the patriarch Shem travelled (as Abraham did) to the land of Canaan; there he was acknowledged as a Royal priest; being, first, KING OF JUSTICE:

JUSTICE:—and who could more properly exercise this office? was he not the Father of the population among whom he dwelt? supreme in dignity by origin?—To promulgate laws, or to apply them, to direct in matters of jurisprudence, to combine the dignity of the magistrate, with the affection of the patriarch, to promote the welfare of those communities who were his posterity—who could be more proper than Shem? He was truly the “king of justice.—Moreover, his tribunal was adjacent to his residence, in “the king’s valley:” and wherefore was this called the king’s valley? but because, here sat the king; and here, according to the duty of a king, he administered justice, righteous justice. *q.* “The royal valley, for dispatch of public and official affairs.”

With this character the other name by which this valley was known, coincides accurately; for the word *shuah* (or *shaveh*, as our translators write it,) signifies, “to equalize, to liken to, to compare, i. e. to adjudge after comparison made: so we find it used, Prov. xxvi. 4. “Answer not a fool according to his folly, lest thou (*teshuah*) be compared to him; and after comparison, be judged to resemble him.” Prov. iii. 15. “All things thou canst desire are not to be (*ishuo*) compared in judgment to wisdom.” Isaiah, xl. 25. “To whom will ye compare me as an act of judgment, and decision, says the Holy One?” So Lam. ii. 13. “To what shall I compare thee—determine thy resemblance, as an act of judgment, O Jerusalem?” In these places, the word implies—to draw a conclusion, after well considering a subject:—to compare for the purpose of determination.

Some Lexicons, however, insist on the sense of *equalizing, to render equal*, for this word *shaveh*: but this will amount to the same as the former; since a person, whose office it is to judge, should consider all applicants as equal: and if any have suffered injury, should *compensate* that injury, till the compensation equals the damages—in fact, he should enforce EQUITY; which implies discrimination, and comparison. This would characterize “the king’s valley,” as “the valley of *equitable compensation*,” of rendering equal justice to all: which is the same in effect with the former sense.

The foregoing sentiments glide very easily into the character of “the king of Peace:” no doubt, he was king of the city of *Peace* (Salem); but, beside this, peace was his delight. When young he had been valiant, but now he was for peace:—as a patriarch, as a judge, as a priest, as a king, he inculcated peace: it is probable too, that he neither drew the warlike sword, nor constructed defensive walls; for I rather suppose that it was the custom of these great, these venerable patriarchs, not to dwell in cities, *i. e.* walled cities. Abraham dwelt in tents; so did Isaac and Jacob, and so did thousands of others; as thousands, and ten thousands do at this day. That Shem lived in tents, appears every way probable: 1. Because Noah his father did so. 2. Because Noah says “He shall dwell in the tents of Shem”—the handsome, perhaps even—the *official* tents. [*Aheli*, vide FRAGMENT, No. ccvi. p. 28.] 3. The migratory life customarily led by these patriarchs, in visiting, and regulating the different districts of their dominions, demonstrates that tents were the fittest dwellings for their purposes.

Much

Much has been said in enquiry, where this city of Salem stood: but *Melchizedek* is not called king of the *city* of Salem, it might be a district, not a *city*. I infer then, 1. That his personal character and disposition was pacific: 2. That his dwelling, where he now pitched his tents, was called by the name of *Salem*,—peace; and this might become its appellation, because such was the well-known character of its royal inhabitant.

It is supposed therefore, 3. That *Salem*, afterwards *Jebus*, and *Jeru-salem*, was the residence of *Melchizedek*. The name Jerusalem, denotes the “vision of peace;” or, “the possession of peace:” *q.* the place where peace was expected to be seen. *Josephus*, *Ant.* lib. i. cap. 10. gives this account: but it seems to follow yet more authoritatively from Psalm lxxvi. 2.

The reasons in support of this supposition, are 1. Jerusalem is in the way from Dan towards Sodom, &c. which way Abraham was now travelling, toward the homes of his retaken captives. 2. The name of Jerusalem, in the adjacent countries, has been “the Holy City,” throughout an antiquity much deeper than our enquiries can extend to; which leads to the conclusion, that before it became the seat of justice and worship among the Hebrews, it had been esteemed *holy*. 3. This character, of holiness, it resumes, without difficulty, as without competition: for Gibeah, &c. which were seats of authority and sanctity, yield to its prior claims. 4. These claims might be well known to Moses, who mentions, twice, at least, “a place which the Lord had chosen to put his name there.” Deut. xii. 4. xvi. 11. 5. Something very like allusions to this character of Jerusalem, are introduced by the prophet *Isaiah*, ii. 3.; and, what is very extraordinary, the prophet *Micah* also, inserts the same, *verbatim*; chap. iv. 2. &c. This remarkable coincidence raises a suspicion, that both drew from the same source; and that, in this instance, they have preserved an oracle of deeper antiquity than themselves: besides, the passages become much clearer, if we suppose that they compare past times and events, with succeeding times and events.

And it shall be in the new series of days,

The Mount of the House of JEHOVAH

Shall be chief over the head of the mountains,

And shall exalt itself over the hills:

And all people shall flow unto it!

Even many people shall go toward it,

And shall say,

“On; and we will go up to the Mount of Jehovah,

To the House of the God of Jacob;

And he shall teach us of his ways,

And we will walk in his paths:

In like manner as from Sion has gone forth his law,

And the decision of JEHOVAH from Jerusalem:

Yea, it judged among great people;

And corrected powerful people, though remote;

And they beat their swords into plough-shares;

And their spears into pruning-hooks:

People take not the sword against people;

Nor do they thereafter learn war.

But they sit, each chief, under his vine,

And under his fig-tree, and none alarms another.

To such effect hath the mouth of the Lord of Hosts decided.

This oracle describes exactly the blessings produced by the judicial interpositions of a king of Justice and Peace: it certainly attributes to Jerusalem a character, which combines at once polity and sanctity, effectual over nations, great, yet submissive; and remote, yet obedient. It is not the only ancient oracle, that the prophet *Micah* has preserved: vide chap. vi. 15.

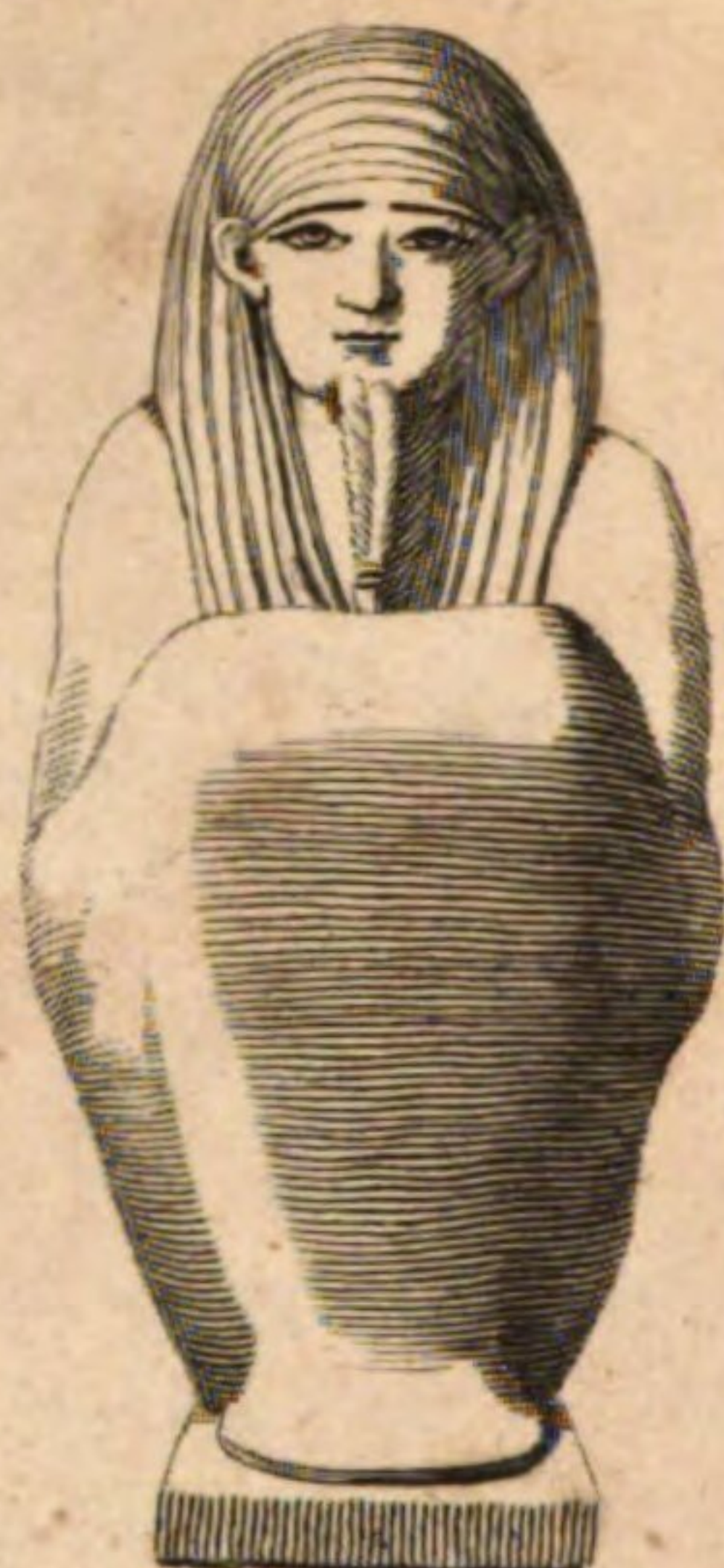
Moreover, this train of reasoning, if admissible, is confirmed, by our statement of the incidents, 2 Sam. v. 6. (EXP. IND.) where we supposed, that, alive to an understood sanctity of their town, and jealous of its infringement, the Jebusites refused David admittance there; what superior principle could induce them to refuse the residence of their king? Nor should we forget, though perhaps not so properly placed here as it might be, that "the king's valley" was immediately in the neighbourhood of *Salem*, adjacent to that city, if not rather annexed to it, and was the place of judgment: now, the current tradition of the East asserts, that in the "valley of *Jehoshaphat*," shall be the universal Judgment; whence so probably, could this tradition originate, as from its having been *anciently* the seat of general decision among surrounding nations? i. e. looking *backwards* and *forwards*, at the same time; an effect we have attributed to the prophecy quoted above.

The name *Jehoshaphat*, signifies "judgment of the Lord;" and the valley of *Jehoshaphat*, is that through which the brook *Kedron* runs: understood also to be "the king's dale," to which *Melchizedek* came out from *Salem* to receive Abraham.

Since then, so many particulars unite, in determining the locality of these places, what has been said may be taken as decisive. From the further consideration of the history, we learn that,—

The king of Sodom came out—suppose from under the protection of *Melchizedek*, at *Salem*, whence *Melchizedek* himself came out to meet Abraham in his triumphant return; toward this sacred magistrate, and this sacred fane Abraham on his part, directed his steps, desirous of acknowledging his obligations to Almighty God, for his success; and of paying his homage to the authorised representative of "his shield, his exceeding great reward:"—intent on publicly manifesting that ascription of glory to God, which is at once duty and honour in a warrior.

When informed of Abraham's approach, his great ancestor advances to the edge of his station; to his tribunal; there receives him, accepts the homage of his descendant, congratulates him on his victory, confirms the divine promises or blessings to him, and his, and with solemn dignity imparts whatever of benediction an old man's heart could wish. But, not to receive without making suitable returns, he treats Abraham and his followers with distinguished hospitality; bestows refreshments while receiving trophies, and enjoys no less what his
guests



TERAPHIM. LARES.

greatest partake, than what they possess. Such is the love of peace of Peace!

This mingled triumph of Melchizedek and Abraham, which we have seen that Melchizedek was Shem. The character of the high priest, who had defeated well deserves the most attentive notice. He was one of the descendants of Ham:—Hamites, from just of the Semites, from the north of Canaan. As, 1. *Aseraphel*, king of Shinar, where the Tower of Babel stood, and, accordingly, the Samaritan version reads "King of Babel": a kingdom unquestionably Hamite. 2. *Arach*, king of Elam, probably the same as *Tallamir*, *Isaiah* xxxvii. 12, thought to be in Armenia. 3. *Chedorlaomer*, king of Elam, i. e. Persia. 4. *Tidim*, king of Edom, mentioned in the Samaritan version called "Sultan over *el Hamir*" of the Harbon. This is in direct opposition to *Jarchi*: but the authority of the Samaritan version, and the nature of circumstances justify the supposition. For what can be more natural, than to suppose that Abraham and Lot (and Shem too) would choose to dwell among their own kindred; that the king of Shinar, where Lot dwelt, took refuge with Shem, because he was his sacred progenitor; observe also, that idolatry is not charged on this country, at this time; though other parts of the grossest nature are. Idolatry we know, prevailed among the Hamites; yet from this event, the sacred character of Shem the priest of the Most High God, had sufficient influence to preserve his posterity, hitherto. This accounts also, why one (a Shemite) who had escaped, even and told his kindred Shemite, Abraham, the Oberste, (i. e. what came from the North) of what had happened; and it illustrates the prominence of Abraham's name, in conjunction with some fellow Shemites, to attend the triumph, and having beat them, to return triumphantly to their great country, where his ministry to present their acknowledgments to God, who was their fathers' God, as well as their own, by profession, and by deed.

This explains not only the reason why Abraham visited Shem in triumph; but also why Shem takes so great an interest in his victory, the which the country was cleared from these invaders; why he blest Abraham, and treated him with such distinction; why the spoils of the spoils were presented to Melchizedek; why the tribunal in the city is erected in the same spot; why Abraham's name is mentioned in the names of the occasion; why Abraham's name is mentioned in the names of the kings he had defeated; and, in short, why the history is preserved in the sacred records, as being one of the most important events which posterity ought to be acquainted with.

These hints lead us to expect, that the high priest, who is mentioned hitherto we have rather considered as a King, or a Warrior, or a Priest, and that a priest of no ordinary description. Many are the names of the office; but that derived from nature, and circumstance, and from among them; for the apostle reports the "fatherhood and brotherhood" of the



guests partake, than what they present. Such is the benevolence of this king of Peace!

This mingled triumph of *Melchizedek* and Abraham, affords other arguments that *Melchizedek* was *Shem*. The character of the invaders whom Abraham had defeated well deserves the most attentive recollection: they were all of them descendants of Ham:—*Hamites*, from east of the Euphrates, or from north of Canaan. As, 1. *Amraphel*, king of *Shinar*: *Shinar* was the district where Babylon stood, and, accordingly, the Samaritan version renders “king of *Babel*,” a kingdom unquestionably Hamite. 2. *Arioch*, king of *Ellasar*, probably the same as *Tellasar*, Isaiah xxxvii. 12. thought to be in Armenia. 3. *Chedorlaomer*, king of *Elam*, i. e. Persia. 4. *Tidal*, king of nations (*goin*,) in the Samaritan version called “Sultan over *el Hamim*,” or the *Hamites*. This is in direct opposition to *Jarchi*: but the authority of the Samaritan version, and the nature of circumstances justify the opposition:—for what can be more natural, than to suppose that Abraham and Lot (and *Shem* too) would choose to dwell among their own kindred; that the king of Sodom, where Lot dwelt, took refuge with *Shem*, because he was his sacred progenitor: observe also, that idolatry is not charged on this country, at this time; though other sins of the grossest nature are. Idolatry we know, prevailed among the *Hamites*; yet from this crime, the sacred character of *Shem* the priest of the Most High God, had sufficient influence to preserve his posterity, hitherto. This accounts also, why one (a *Shemite*) who had escaped, came and told his kindred *Shemite*, Abraham, the *Oberite*, (i. e. who came from *Ober-el-Nahr*,) of what had happened; and it illustrates the promptitude of Abraham to take arms, in conjunction with some fellow *Shemites*, to attack the *Hamites*; and, having beat them, to return triumphantly to their great ancestor *Shem*, by his ministry to present their acknowledgements to that *Jehovah*, who was their fathers’ God, as well as their own, by profession, and by descent.

This explains not only the reason why Abraham visited *Shem* in triumph; but also why *Shem* takes so great an interest in his victory, by which the country was cleared from these invaders; why he blesses Abraham, and treats him with such distinction; why the tithes of the spoils taken are presented to *Melchizedek*; why the tribunal in the king’s valley is selected for the solemnities of the occasion; why Abraham takes nothing from his kindred, the kings he had delivered; and, in short, why this history is preserved in the sacred records, as being one of those remarkable events which posterity ought to be acquainted with.

These hints lead us to contemplate this venerable patriarch, *Shem*, whom hitherto we have rather considered as a king, in his character of a priest also; and that a priest of no ordinary description. Many are his qualifications for this office; but that derived from natural descent must not be enumerated among them; for the apostle reports him “fatherless and motherless,” that is,

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GENESIS xiv. 17.

as he immediately explains himself "without pedigree"—genealogy-less. This was an insuperable blemish in a Levitical priest, and incapacitated those affected by it from priestly privileges; vide *Nehem.* vii. 65. Beside this, it may be said, in conformity to the import of the tradition, that *Shem* had neither father nor mother, in the *post-diluvian* world: he was of the former world, of the former people; and *now*, pedigree, descent, was reckoned *from him*. I prefer, however, the Levitical idea: and suppose the apostle adopts priestly terms, to express the absence of claim to the priestly office by descent; according to another expression of the same sentiment, "he whose pedigree is not reckoned from them (the Levitical orders) received tithes;" and this is the very application of these terms, "fatherless and motherless," in Euripides, *Trag. Ion.* Act i. v. 110. also Act iii. v. 837.

But why had *Shem* no right, by descent, to the priesthood? It is customary to put him *first* in enumerating the sons of Noah; for we usually say, "Shem, Ham, and Japhet"—and, in *FRAGMENT*, No. xix. p. 36. this is asserted, as the proper station of *Shem*, in conformity to the authority of the Indian *Puranas*: but, it really is very remarkable, that there is the same confusion in the Indian records as in the Mosaic; and *Shem* is sometimes spoken of as the *eldest* son of Noah, sometimes as his *second* son. This extremely curious coincidence leads to important consequences, especially in connection with other errors of a like nature. I take the fact to be, that *Japhet* was the *eldest* by birth; whence his name, and his double portion as befitted his birthright. But *Shem* being appointed to the priesthood, received an official precedence, and being accustomed to this, the consequence has been, that he is named (among his own descendants, at least) *before* his brother Japheth; though not born before him, nor by the operation of any natural principle entitled to this distinction. The sentiments of CALMET, (*Dict. Art. SHEM*) are, that *Shem* was the second son of Noah, and the numerous classes of learning and duty, which the Jews attribute to him may be seen in that article. They are as well political as sacred.

We have now, considered in their series those particulars which have usually been thought perplexing, except that one which is admitted to be the most perplexing of all: what can be intended by—his *perpetual, unchangeable*, priesthood? by—his *still living*? by—the power of an *endless life*? How can one man be a priest to perpetuity? what is this unchangeable priesthood? unchangeable, by reason of the continued life of him who possesses it? Whence could a conception so extraordinary, so contrary to experience originate? Providence has kindly interposed, to assist in answering this question, also: and when the usual stores of learning are exhausted, has opened fresh repositories to elucidate this hitherto dark and difficult subject.

In what sense is it said of *Shem* that he is living? Observe, the apostle uses a word which does not imply strict demonstration of this: but a current report, general belief: "it is witnessed,"—not by myself,—nor by any person to whom I refer confidence; but, *it is admitted*,—[*Fr. on dit.*] and this may be taken

taen as the fair import of the word used.—But how is even this looser sense this popularly attributed immortality, to be justified?—The question is answered, by producing from the *Puranas* the following extract; the tenor of which no one in our part of the world would ever have imagined.

NOAH. “ ATRI for the purpose of making the *Vedas* known to mankind, had THREE SONS: or, as it is [elsewhere] declared in the *Puranas*, the *Trimurti*, or *Hindu Triad*, was incarnated in his house. THE ELDEST [son] called SOMA, or the *Moon in a human shape*, was a portion, or form, of *Brahma*. TO HIM THE SACRED ISLES IN THE WEST WERE ALLOTTED. HE IS STILL ALIVE THOUGH INVISIBLE, AND IS ACKNOWLEDGED AS THE CHIEF OF THE SACERDOTAL TRIBE TO THIS DAY.” *Asiatic Researches*, Vol. V. p. 261.

Every word of this testimony is important, and it agrees with the western reports concerning Melchizedek: the comparison is striking, and justifies attention.

SHEM, the eldest son of NOAH.
Melchizedek's mother was the Moon.
He was priest of the MOST HIGH GOD.
The land of Canaan fell to the posterity of Shem.
Of him it is witnessed that he liveth.
Consider how great this man was:
—Superior to Levi,—superior to Abraham.

SOMA, the eldest son of ATRI,
Was the Moon in a human shape:
Was a portion, or form, of BRAHMA,
To him the Sacred Isles in the West were allotted.
He is still alive, though invisible.
He is acknowledged as CHIEF OF THE SACERDOTAL TRIBES, TO THIS DAY.

In short, the parallel is exact: it assists us even beyond what appears at first sight. No wonder now, that this patriarch was “ king of peace,” was a character too sacred to be molested by war: no wonder that Abraham, and in him Levi, paid tithes to this most venerated personage, &c. &c.

This multiplicity of names for the same person in the East is notorious: *Vishnuh* has a thousand: *Siva* also has a thousand: other ancient characters in proportion: so that no doubt on the identity of ATRI's being NOAH, arises from dissimilarity of appellation. The name SOMA is known as *Sem*, or *Shem*, in other writings: indeed the lxx. constantly use *Sem*, or perhaps, *Sēm*.

The curious history, thus brought to light, from a far country, affords several inferences;—as

1. The Apostle says, many things might be uttered respecting *Melchizedek*; but they were hard to be understood; the hint seems to point at various reports concerning him, which, not improbably, were in traditionary circulation among those Hebrews to whom the writer addressed his epistle;—“ it is witnessed”—not by Scripture, but by report, as you know.

2. This may shew the propriety, and the bearing of the Psalmist's expression, “ a priest for ever”—to perpetuity—like *Melchizedek*; like him, who is “ still alive, though invisible; and chief of the sacerdotal tribe,” though not acting as such now in a public capacity, [but thought to continue his office in heaven itself.]

3. The priesthood of *Shem* continuing to be exercised in his person during *five hundred years*, suggests, almost naturally, an idea of perpetuity: but, no doubt, it was transmitted from him to a qualified descendant; so that *the sacerdotal character*, itself, the *Order of priesthood*, was considered as continued without interruption, *q. endless*. Who was his successor, in whom this dignity survived? Was *Adonizedek* of his posterity?—was he also “king and priest?” (or was he, not *Melech*, king, but only *Adoni*, lord, of *Zedek*, i. e. by conquest, or &c?) Did any of *Shem*’s family remain in *Salem*? if so, consider the character of *Araunah*, in connection with hints heretofore dropped on the sacredness of *Jebus*, or *Salem*, 2 Sam. xxiv. 23. where he is called “king,” and offers to David a royal present: but David *stipulates expressly* for purchase, &c. as if he were dealing with an equal, in some respects, at least.

4. The access of Abraham to the divine presence by means of this royal priest, and the communications this patriarch might make to Abraham, must not be allowed to escape notice. When Abraham was divinely directed to quit *Kedem*, was *Shem* the messenger?—When he offered up Isaac, was it near the *Salem* of *Shem*?—When Rebekah enquired of the Lord, was it by the agency of *Shem*? did *Shem* prophetically inform her, “two nations are in thy womb,” &c?

Was *Shem* the only person reported to enjoy *endless life*? did rumours of a translation like that of *Enoch*, or that of *Elijah*, circulate concerning him? [What could those brethren mean, who reported concerning the apostle *John*, that “he should not die?”—What knowledge had they of “witnessings” resembling their report, in any other instance?]

It may be proper to anticipate an objection, not new, indeed, but forcible, were it just, by an observation in vindication of the chronology of *Shem*’s life: that Patriarch lived, by the shortest computation, till Isaac was fifty years of age: but, other computations add forty or fifty years to his life. At the shortest period, however, he outlived his father Noah, one hundred and fifty two years: and his son Arphaxad, sixty years; consequently, no chronological difficulty attends the principles adopted as the basis of these arguments.

If it be asked,—Why does not Moses in Genesis, or the Apostle in the Hebrews, call *Melchizedek* by the name of *Shem*? It may be sufficient to answer, because he was much better known at that time, and in that country, under his title, “king of justice.”—He was *better* known: for though we find him called *Shama*, *Sharma*, or *Soma*, in India, yet that name has not been preserved in the West. *Melech* signifies *king*: admitting this title of office we observe, 1. *Sanchoniatho*, a Canaanite, or Phenician writer, places together *Misr* and *Sydyc*; the first is referred to the father of the *Mizraim*—Egyptians: of the second, he says, “*Sydyc* found out the use of salt;” not, it is likely, the *culinary* use, but the *religious* use of salt: for that salt was used as an oath, vide FRAGMENT, No. clv. and this *sacred* use of salt, combines perfectly with the character of *Melchizedek*, as king of justice, and judge of all around him. The name *Sydyc* is evidently the Hebrew *zedek*, justice: and so *Philo Biblius*, translating

lating *Sanchoniatho*, renders, *δικαιος*, "the just." Moreover, Bochart says, p. 784. The Orientals called the planet Jupiter by the name *Zedek*, in honour of *Shem*; as appears by the old Jewish writings. Indeed, that Jewish tradition considered *Shem*, as the same with *Melchizedek*, is evident from the Targums of Jonathan, and of Jerusalem, the Midrash *Agada*, as cited by Rabbi *Solomon*: and the Caballists in *Baal-haturim*. Now, if this were an article not denied among the Jews, the reason why it needed no elucidation admits of no dispute; probably too, the inhabitants of Jerusalem, would have been highly offended, with any doubt on the subject, or any question whether the *Salem* of this king was their own *Jerusalem*. Is there any allusion to the title of this king, in 2 Sam. xxiii. 5. Isaiah xli. 26. Acts iii. 9. vii. 52. James v. 6.?

The apostle tells the Hebrews, that he had much to say concerning *Melchizedek*; but it was of very difficult interpretation: certainly, the writer himself understood his subject: but he refrained; because it was too recondite, and could only be comprehended, and relished, by consummate learning, and intelligence. Moreover, if Peter has this passage in view, when he mentions (using the same word as the writer to the Hebrews) "things hard to be understood," in the writings of the learned apostle, which he also unites with complaints against those who are "unlearned and unstable"—considering these things, we ought to be very cautious in our *determinations*: but it will not follow that British Christians, who are further advanced in the doctrines of their religion, than the half-judaizing Hebrews, may not study with advantage those *deeper* matters which the prudence of the Apostle withheld him from discussing at large.

It is but fair to apprise the reader, that these principles, if established, lead to important consequences: for as we have elsewhere thought, that the art of writing was extant, even in ages prior to that of the Abrahamic migration, and this art being confessedly a priestly study, it will follow, that *Shem* might bring into the West, and there communicate to Abraham, and by him, to his family, &c. the then extant parts of that volume which we esteem sacred. He might, indeed, communicate much other information, and many additional predictions; while possibly, only those which referred to the land allotted to Abraham and his posterity, are come down to us: those referring to other nations having been neglected among the Jewish historians. This has great effect on the authority of that system of which Moses was the minister. It supersedes tradition; it does not admit any interval of time wherein the books written could become obsolete, or so much as difficult to a skilful linguist, like Moses, &c. It accounts also for the knowledge diffused throughout Canaan, that this country had been authoritatively, *i. e.* divinely, allotted to the Hebrew nation, in remote ages, &c. &c.

We have seen the kings, *east* of the Euphrates, war against those of the *west*; later ages we see Nebuchadnezzar, and other kings of Nineveh, and Babylon, extend their conquests over Egypt, by the same way. Did the antient *Palli*,
or

or Shepherds of India, conquer Canaan and Egypt: and from this people did that “king arise who knew not Joseph?”——Admitting this supposition,

Observe, how it justifies that passage of the Mosaic writings which has been thought demonstrative against their being written by Moses, “the *Canaanite* was then in the land;” meaning, the *original* natives of Canaan, not their *conquerors*: and, if the reader will keep in mind, in perusing Scripture-history, that Canaan was peopled by a *mixture* of the descendants of these natives, and of those of their conquerors, at various times, he will find reasons for attributing actions to one of these classes of inhabitants which would be very unaccountable if attributed to another. For instance, suppose *Rahab* the *zoneh* [*hostess*, at most, not *kedeshah*, harlot;] to have been one of these original *Canaanites*; see what feelings might induce her to delude the *Palli* king of Jericho: see how her faith relied on the appointment of Canaan to the Hebrews, in which all *Shemites* surely acquiesced.—“I know that the Lord hath given you the land,” &c. See also why *some* *Canaanites* (of the original stock) might be left undestroyed in Judea, possibly unmolested, &c. &c.

Observe, how sacrificing the *beee* kind was “an abomination” to the *Palli* Egyptians: that animal is held sacred in India, to this day. This explains also the respect paid to the Nile, with the sanctity of that river, assimilated by the new comers to the Indian Ganges; whence also its characteristic as holy, in the Indian accounts of it, such as they now appear.

Observe, that the *Praw*, or *Parau*, of India, (the *Porus* of the Greek writers) is the same title of distinction as the *Parho*, or *Pharaoh* of Egypt.

There is also, another passage of Scripture, on which this principle sheds considerable light; a passage which has been a very thorn in the sides of commentators, “out of Egypt have I called my son;”—or, “when Israel was a child, then I loved him, and called my son out of Egypt.”

Observe, how the comparison stands between Israel and Christ. *Young Israel* was sent down from Canaan into Egypt, by Divine Providence; and during the residence of Israel in this country, the *Palli* over-ran Canaan, conquering and devastating, all before them: but Israel escaped this destruction, being safely sheltered in Egypt; though in process of time the *Palli* conquered this country also, whereby Israel became subject to many adversities even there—to slavery, and to oppression.—In like manner, the *child* Jesus sent by Divine interposition into Egypt, escaped the bloody fury of Herod; being sheltered in safety, though certainly exposed to many inconveniences. Israel was brought up out of Egypt, safe, strengthened, undestroyed; so was Jesus: the parallel, therefore, is complete; since both were preserved for future services, according to Divine appointment: what is wanting to justify the Evangelist’s *accommodation*?——

As to this conquest of Egypt, by the *Palli*,——

A passage from Captain WILFORD’S *Puranic History* of Egypt, seems to describe such an event; “SHARMASTAN received its name from SHARMA: his descendants being obliged to leave Egypt, retired to the mountains of *Aja-gar*

gar (in *Abyssinia*) Forced to emigrate from Egypt, (or, compelled to seek refuge in the mountains) during the reigns of *Sadi* and *Rahu*; they are said to be a quiet and blameless people, to have subsisted by hunting wild elephants, of which they sold the teeth, and ate the flesh," p. 66. "The children of *Sharma* travelled after the building of Babel, from the Euphrates to Egypt." p. 68. *Asiatic Researches*, Vol. III. This accounts for the ready journey of Abraham to Egypt, where he went among his own kindred: also, by what means the same language obtained in these countries. The same of Jacob. It eases the suddenness of Joseph's promotion also, he being of the same *Shemite* stock. In after ages, it illustrates in some degree, the interest taken by the queen of Sheba, in Solomon's grandeur; with her desire to institute the same worship, &c. she being also of *Shemite* descent. But we cannot enlarge on these incidental particulars.

Observe, also, how this modifies what has been charged as wanton cruelty in Israel toward the people of Canaan; for, it was not so much the truly *ancient* Canaanites, whom Israel attacked, as the same *Palli* nation in Canaan, which in Egypt had so barbarously treated the Hebrews. Since then, those in Egypt had patronized such cruelties, no doubt, but what their compatriots in Canaan practised the same enormities; and were justly punished for them. We have seen the Hamites and Shemites wage mutual war, in the days of Abraham;—the same rancour continued among their posterity; for Israel was a *Shemite* people;—but, the *Palli* were *Hamite*. Hence one reason, also, for the conduct of Moses, in "refusing to be called the son of Pharaoh's daughter;" his acquiescence would have been an exchange of his *Shemite* descent, for a *Hamite* adoption. It illustrates too, on what principles he "preferred before all the riches of Egypt, the reproach of the expected Messiah," who was to issue from the family of *Shem*, according to predictions made to *Shem* and to Abraham. It detects, moreover, that proportion of truth, though mingled with falsity, under covert of which the Gibeonites deluded Israel, by pretending to be from a far country, and exhibiting those signs of remote residence, which might well enough have become their ancestors. It shews, too, what, and whence, were the *Philistines*, who so long maintained themselves against Israel; not Cretans, not Greeks (exclusively) but descendants of those *Palli*, who, inhabiting the sea-coasts, could always be recruited by means of shipping. Nor let us forget, that this explains the cause why the deities of India and of Philistia, were the same; though in length of time, Egyptianized, or Grecised; and this adds to what we have elsewhere said, on the expectation that the researches of our countrymen in India will clear many other obscurities, by tracing their causes to the fountain-head of observation.

We may include, also, that this shews the reason of the Jewish hatred to the Samaritans in later ages; for these were a colony of *Palli*, or *Hamites*, brought from the east of the Euphrates, and settled in a country where the *Shemite* Jews claimed paramount property.

To follow this train of reasoning to its extent, would be too much for the opportunity; what is said, opens so many new appearances, that propriety demands their close examination, before further proceeding. If it be proved, by candid enquiry, that these Ideas are erroneous, they can have done no harm, as yet; if, on the contrary, they be found agreeable to truth, they will, under the direction of Providence, be investigated, and their veracity vindicated; till at length, that information which we have been labouring to communicate, has its proper influence, in relieving the SACRED ORACLES from a burden of human error, under which sundry parts of them have been long disgraced, if not mutilated, depressed, if not destroyed.

We are not ignorant, that these suggestions are directly opposite to those which are current among the learned, and in particular to those of the very erudite Mr. BRYANT: that gentleman supposes to be Shemite kings, those whom we have taken for Hamites: he supposes the shepherd kings from India, (our *Palli*,) to have been expelled Egypt before the sons of Jacob entered it; but we presume to think that circumstances accord much better with our own principles than with his. It is not to be expected that in this abstract all accessible authorities, or appropriate observations can be given on subjects so difficult. Much remains to be done, and Providence will engage *somebody* to do it, whether or not that *somebody* be ourselves.

In times so long antecedent to what regular histories are come down to us, the services of the meanest assistants, tradition, allusion, hyperbole, hieroglyphics are not to be contemned: wherever a trace of truth appears, however faint, its aspects however unpromising, *there* is the attention, and often the anxiety, of the enquirer, directed. Long, very long, is it before the true sense of such obscurities can be seized or appreciated by the mind; that a truth is enveloped under such concealment, is often a persuasion, or even a perception of the understanding, long before the nature of that truth is discovered, and when the nature of it is fortunately evinced, the application of it to useful purposes remains for protracted consideration; and, who can insure his mind from contemplating truth itself under an obliquity which may render it deceptive? These are but a part of the difficulties which ought to engage us to accept with candour the labours of those, whose efforts are thus directed; being well aware, that, under the blessing of Providence, the honour of illustrating Holy Scripture, is to be expected only from diligence and impartiality, from a talent given, not for concealment, but for employment; but which nevertheless, though exerted with the utmost care and sincerity, can prefer no pretensions to infallibility.

TERAPHIM: LARES.

GENESIS XXXI. 30.

ON this subject we remark, in the first place, that under the Article TERAPHIM in CALMET's *Dictionary*, several suggestions of learned men are offered: each of them has something plausible; and indeed, each has advanced somewhat toward being right; though, it may be, the sentiments of no individual have attained entire success. We can hardly avoid desiring the reader to peruse that Article, before we submit our reasonings on this subject.

On the word TERAPHIM, we adopt the idea of SELDEN, that *teraph* is a Chaldea pronunciation of the Hebrew *seraph*; such being a very common variation between the two dialects; but then we do not suppose the word *seraph*, which signifies *burning*, denotes here what is usually understood by it, a superior rank of holy angels; but rather, according to its natural import, a *fire*-or heated-*subject*: that is to say, a *terra-cotta*, a burnt-or baked-clay subject, one which had undergone considerable degrees of heat, in the furnace, or kiln; as the custom still is, to harden, by baking, models of clay, pottery, china, &c. And it is common among our statuaries to *burn*, bake or kiln-dry, all studies, models for statues, &c: which are first sketched in clay. We accept therefore the idea of a burnt-in, or hardened-by-fire, or even fire-proof subject, as the import of the term *teraph* or *seraph*, when applied to figures capable of sustaining that process; whether models of clay, casts of bronze or of other metal which have passed the furnace.

We also adopt the idea that the *teraphim* of Laban were his household gods; his *Dii penates*: those powers who in his opinion, protected his dwelling, and under whose auspices he desired constantly to dwell; as JURIEU supposed.

This view of our subject, leads to the inquiry, 1. What were the *Penates* of antiquity, and their offices? 2. What were their forms, or figure? 3. The application of these remarks to passages of Scripture, where the word *teraphim* occurs.

N. B. The word *teraphim* is plural, or dual, implying *two teraphs*; [but whether more than *two*?] Possibly it is an instance of the plural termination expressing *dignity, excellence*.

OF THE PENATES OF ANTIQUITY.

The gods Penates, Lares, or Genii, were pretty much confounded one with another. Lares are sometimes called Genii of places; but it seems rather desirable, to restrain the Lares to the care of houses; or more strictly, to the care of domestic concerns: Penates to the care of the house, or of houses in general: and Genii, to places; whether in, or out of, houses, &c. I believe this to be correct; but it is not always observed in antiquity, for we have inscriptions *Jovi et Geniis loci*, where Genius evidently imports the protecting power; the same as the Lares and Penates; for other inscriptions are varied to *Jovi et Laribus*, or *Jovi et Penatibus*. Genii were also taken for the Manes, or departed spirits of the dead.

GENESIS xxxi. 30.

Apuleius,

Apuleius, speaking of the demon or genius, of Socrates, tells us, "Genius is the soul of the man, liberated, and disengaged from the confinement of the body": these were anciently named in Latin *Lemures*: from these *Lemures* those who take care of such as dwell with them in their house, [or are of their descendants, supposed to reside in the paternal habitation] and who are kind and pacific, are called "familiar Lares."—St. Augustin says nearly the same as Apuleius. Some have called them tutelars, *Tutelæ loci*; and the Greeks seem to have used the titles indiscriminately, θεοὶ ἐφεσίοι, κατοικίδιοι, ομόγενεῖς, ἐγγεῖς, ἐρμιοί, κλησίοι, μύχιοι, πατρώοι: "Gods, the Lares, domestic, born in the places, aborigines, defenders or protectors of houses and property, dwelling in the most secret (or private—secluded—) parts of the house, paternal gods." Vide *Dion. Halicarnass.* lib. i. p. 54.

The Lares then were house protectors, and beneficiaries to the domestic, private, and internal residence, and to the residents within such dwellings.

When the boys were grown up to youths, and quitted their *bullæ*, or balls, which as amulets, or talismans, hung from their necks, they suspended these *bullæ* to the images of the Lares of their houses, as Persius tells us,

Bullaque succinctis Laribus donata pependit.

And Petronius says, "Three boys entered, clothed in white tunics; two of whom placed on the table, Lares, adorned with *bullæ*; the third, turning towards them, with a cup of wine, cried "Ye Gods be propitious to us!" *Dii propitii!*—To the same effect, Coriolanus, taking leave of his mother, his wife, and his country, concluded his address by these words: "farewell O Gods Penates! O paternal Lares! O Genii! who occupy this place, farewell." *Dion. Halicarn.* lib. i. vide also lib. viii.

The number of domestic gods was gradually increased, till every god of every kind, if he were but placed within the habitation, was considered as a tutelary deity: and what Suetonius says, of Augustus, seems to imply, that he had a spacious apartment in his palace, for his *Dii Penates*. "A palm tree," says he, "sprouting up between the joints of the stones, before his house, he ordered it to be carried into the court of the *Penates* Gods, and took great care to promote its growth."

There were also deities supposed to be exclusively attached to certain cities and places: these are the proper TUTELARY deities. The idea occurs in Scripture, 1 Kings xx. 23. "Their gods [of Israel] are gods of the hills, and not of the valleys;" let us therefore fight them in the valleys, where they have no power; and then we shall defeat Israel. I mention this, merely in passing, to shew how nearly the same sentiments were maintained in Europe as in Asia; but shall not enlarge on it here. For an instance of the manner of *evocating*, or calling out, tutelary deities, from their cities, &c. vide in CALMET'S *Dictionary*, the article DEVOTING.

OF THE FORM OF THE LARES.

The Lares, or Penates, were figured under the form of that animal (the dog) which

which most faithfully takes charge of the house in the absence of the proprietor; because, such protectors of a dwelling, should be like a faithful dog,—kind, gentle, and benevolent, toward the members of the family, and their inmates, friends, visitors, or &c.—but fierce, angry, and jealous, toward strangers or enemies. Moreover, they should know the house, and premises, and be at no loss in superintending their charge. Other properties wherein Lares should resemble dogs, are recited by *Ovid*, Fast. 5.

*Servat uterque domum, domino quoque fidus uterque est,
Compita grata Deo, compita grata cani,
Exagitant et lar, et turba diania fures,
Pervigilantque Lares, pervigilantque canes.*

If then, a dog was adopted, to signify the protecting Lares, we may be sure it was not a common dog, but rather, as is said, with respect to Anubis, a dog's head on the human figure; and we learn from Plutarch, that the Romans had this idea very strongly: they not only supposed their deities accompanied their dogs, but they represented them clothed with the skins of dogs: whence in *Quest. Rom.* No. 51. he asks, why the Lares, called properly *Prestiti*, [watchers; comp. Dan. iv. 13; a tutelary genius of the kingdom] are covered with the shag [or skin, &c.] of a dog?—*Ovid* tells us they were called *Prestiti*,

Quod praestent oculis omnia tuta suis:

because they looked sharply about them, to take care of what was committed to their charge. Nor let any deity despise this office, for even Jove himself is reckoned among the Lares: hence we have *Silvano domestico*, and in like manner, *Jovi domestico*, “To Jove the domestic God:” and on this principle the puzzling inscription, SILVMIO DOMESTICO, may be read distinctly, DEO SILV-ano M-agno JO-vi DOMESTICO.

Among the Egyptians, the lion as well as the dog, was esteemed a watchful protector: whence we have in *Horapollos*, i. 18. “When the Egyptians designed to represent a vigilant man, or watcher, and also a guard (*φύλακα*) they formed a lion's head;” which custom, perhaps, arose from the report that the lion (as other of the cat kind) sleeps with his eyes open: [rather perhaps from the presiding Deity on Mount Lion, the original Olympus; the Mount Meru of India.] We have several statues yet remaining, which are as it were, in a sleeping-watching posture, *velut nitentium*, winking, or blinking. They are thought by some, to represent the god *Petto*: by others, they are referred to the Belphegor of the Moabites, of whom Vossius, Maimonides, *de Idol.* iii. 2, &c. and Selden, have treated. That the Egyptians adored human figures with animal heads, but especially with lions' heads, is witnessed by Tertullian, *Apol.* 16. Minutius Felix, *Oct.* 28: Athanasius, *Contra Gentes*, p. 20. Arnobius vi. 10. and Porphyry *de Abstin.* iv. 7. and their priests in their public processions wore the skins of such animals, and paid other adorations to them. This agrees with our hint, that the origin of such rites might be derived from the Olympian assembly.

It will easily be supposed, that gods represented *winking*, were rather sitting than

than standing: and sitting, as observed in FRAGMENTS CXIII, page 116, was much rather the attitude for gods than standing, or walking; in fact, sitting was an attitude of residence, of dignity, of receiving service, not serving; and this in eastern countries, and under a sultry sun, formed a strong distinction between the object of worship, and the worshippers intent on doing it honour.

We have thus stated what was the attitude of the domestic gods of Rome, [the same is true of Greece] and of Egypt: the same we shall find was that of the Syrian deities: which brings us nearer to the immediate subject of our consideration. Such, at least, was the attitude of the famous *Palladium* of Troy; which was an image of *Athene*, usually understood to be *Pallas* or *Minerva*; but rather an allegory of guardian Providence, [the watcher, as in Daniel, already alluded to] or thus: "Athena was daughter of Chronus," *i. e.* vigilance is produced by time; *Experientia docet*: [but properly, Chronus was one of the patriarchs saved in the ark, and Athene was his descendant.]

Apollodorus, *Bibliotheca* lib. iii. cap. 11. intimates that *Athene* herself shaped the image of the Palladium. Herodian, and Servius, hint that this image was of wood; as Herodotus says, the ancient Egyptian statues were. And Tibullus says the Penates were originally of wood; (when faith, says he, was better kept than afterwards) but this implies the poverty, not the piety of a country.

Tunc melius tenuere fidem, quum paupere cultu

Stabat in exigua ligneus aede Deus.

LIB. i. ELEG. II.

The Palladium, beside sitting, had the legs joined together, which is a striking similarity to the Egyptian statues; Apollodorus says, *τοῖς ποσὶ συμβεβηκός*, leg-united; the legs not separated. Vide the statue of the Colossus, Plate of Nebuchadnezzar's Image, FRAGMENT, No CXIII.

Heliodorus also, lib. iii. p. 148, says, the Egyptians made the statues of their deities with conjoined legs, as if united, *τῶν θεῶν Αἰγύπτιοι τῷ πόδε ξεύγνυντες, καὶ ὥσπερ ἐνῆντες ἰσῆσιν*: "to indicate, that their deities do not travel, or move by walking, but glide through the air." So Virgil describes Venus when discovered by Eneas,

Et vera INCESSU patuit Dea.

"Smooth sliding without step."

MILTON.

Herodotus relates, iii. 37. that Cambyzes, entering the magnificent temple of Vulcan, at Memphis, ridiculed the image of that God, because it resembled the *Pateci* of the Phœnicians;—*i. e.* it was like a Pygmy, *vide* FRAGMENTS, No. Y. 322. and Plate.

In confirmation of what has been said, that the deities of the Trojans were represented *sitting*, we refer to *Dion. Halicarnasseus*, who says, "in a temple near the Forum Romanum were two Trojan deities, which were two young men *sitting*; armed, each with a spear: the sculpture was extremely old. We have other statues of the same gods in the old temples, which are all in the military habit." [The reader will recollect the *Dioscuri*.] The Trojan Penates, says Varro, as quoted by Macrobius, were carried by Dardanus from Phrygia into Samothracia:

Samothracia: Eneas brought them afterwards from Troy to Italy. The Phrygians named their *Penates* “the great gods; the good gods; the powerful gods; and paternal gods:” *Θεοὶ πατρῷες.* *Vide* the inscription on the Plate of Baal and Moloch, FRAGMENT, No. CVIII.

We should observe too, that Lycophron calls the Palladium *φοινικεαν θεαν*, “the Phœnician goddess;” meaning by Phœnicians not the later Philistines who make so conspicuous a figure in Scripture, under the kings of Israel, but the Phœnicians, or Canaanites, an early colony from Egypt (or from India.) And, indeed, I think it admits of doubt, whether, as Lucian says, *Herm.* 44. “The Egyptians [were the first who] expressed sentiments, *i. e.* symbolized, by means of men-figures with heads of dogs, and lions, instead of letters and words:” and more generally, as Lucan expresses himself, iii. 222, and Tacitus, *Ann.* xi. 14. “*PRIMI per figuras animalium Ægypti sensus mentis exprimebant.*”—We ought however to note, that this manner of compounding the figure, has been thought to be the origin of creature worship; because the bestial part, having, when in union with the divinity as a symbol, acquired a sacredness, it was thought to retain that quality, when it was separated from its original stock; and so became an object of worship also. *Vide* Warburton and Dorigny.

Thus we have described the *Dii Penates* of the Romans, the Greeks, and the Egyptians; and have traced them to Phœnicia, and to Syria [and to India.] On the strength of these connections, and their inferences, we shall assume that those of Chaldea were similar in form and manner: and proceed to examine the notions which we find attached to the *Teraphim*, in Scripture.

1. Rachel stole her father Laban’s gods—*teraphim*, Gen. xxxi. 30, 34. Consider these as the *Dii Penates* of Laban; and we perceive their importance to him, the reason why he lays so much stress on their loss, and why he ends the climax of his complaint against Jacob, by remonstrating “wherefore hast thou stolen my gods?”—we see too by our Plate, the probable size of these *teraphim*; so that Rachel might easily convey them away, without the knowledge, or participation, of Jacob, and could with great security wrap them up, or cover them in the bundle, or &c. made by the necessities which she carried in her *CUR* or car; a vehicle large enough to conceal them, whence we infer that they were of no great magnitude or weight, yet a very unlikely thing to be employed as a covering for them, and Rachel only sitting on *that*, whereon Laban knew she had rode so long a journey, he little supposed they could be secreted under, or in, such a conveyance.—If Eneas carried off his *Dii Penates* in a box (called expressly a *lararium*) Rachel might easily carry her *Teraphim* in a basket. *Vide* the Plate &c. *CUR*, or *CAR*, Gen. xxxi. 34.

Laban seems to have searched with too much diligence to have left unexplored any vehicle liable to suspicion, nor could he readily have supposed that Rachel sat on his gods with that excuse upon her which she pleads to her father; and which was no doubt sufficient to deter his search.

2. We read, Judges xvii. 5. that Micah had a house of gods (so we have seen Augustus have a whole apartment of *Penates*) he had also “an ephod and *teraphim*,”

I apprehend

I apprehend that by inspecting our Plate, on which the figures Nos. 4. 5. are of bronze, we have pretty nearly the "molten image and the graven image," which the founder made for Micah; and probably, the expences of making two such figures of silver, together with their appurtenances, might easily cost in those days, two hundred shekels of silver, verse 4. which at 2s. 4d. each is about £. 23. a sum not adequate to the formation of very large statues. The importance attributed by Laban to his Penates, applies to and explains the urgency of Micah, who like Laban, pursued after his gods, and who risked his life to procure their restoration.

3. As to the "speaking" attributed to these images, we should remember that anciently there were many oracular statues, nevertheless, it may be questioned whether these Teraphim were *especially* more VOCAL, by office, than others: the expression Zech. x. 2. "the Teraphim have *spoken* vanity," may be referred, generally, to the expectation of their protection, and of the good fortune attached to them; *q. d.* "they have failed in sending rain, and showers: much was hoped for from them, but they have disappointed those hopes—their patronage has been deceptive, illusive, useless:"—all which might be, without any powers especially vocal being attributed to them.

4. In 1 Sam. xix. 13. we have a history, in which the Teraphim bear a considerable part. "*And Michal took HE-teraphim*, and the phrase is not only *he-teraphim*, but *AT-he-teraphim*, the *VERY TERAPHIM themselves*, and placed them—not—IN the bed," but, literally, ON the *mithah* or duan, [FRAGMENT, No. XII.] and the cushion which used to lie at the back of the duan, and which was made of goat's hair, she took (v) FROM its head—or *heading*, i. e. where it used to lie at the head, or upper part of the duan; this she placed lower down, and wrapped, enveloped it, in a covering of clothes, as if to encourage proper warmth in a sick person; at the same time spreading the goat's hair stuffed so as to resemble human hair in a state of disorder. Michal pretended that David lay there sick; and the pillow being about the size of a man, and resembling, as much as she could make it, under its covering, a man drawn together by sickness, it passed for such, to the first messengers of Saul, who only respectfully and distantly beheld it; but the deception was detected on close inspection. What then did Michal mean, by placing the teraphim on David's bed? 1. to commit him as the person who usually slept there, to the protection of her household gods; 2. to procure a reverence, and security for the place, from her father's agents: as she probably foresaw her father would not respect even her female privacy, [vide FRAGMENT, No. XXV.] and by this device she gained time. But that these teraphim were not equal to a man in SIZE, should appear, from the consideration of the difficulty attending the removal of such heavy goods, even from place to place, in the same chamber; from the conspicuous idolatry they would have demonstrated in the family; from the consideration that the cushion would answer the purpose full as well, and was much more manageable; and from the time it would have occupied to have carried such a contrivance into effect; whereas, on our principles,

principles, the whole might be done in an instant, and the story shews there was not an instant to be lost.

These considerations militate against supposing the teraphim to be the size, or nearly the size, of a man; not to insist on the evident construction of the text, which those who refer the word (מְרַשְׁתִּי מֵרַשְׁתִּי MERASHETIU) translated "for *his* bolster," are obliged to trespass against, by referring a word in the singular, *his* bolster, to a word in the plural, teraphim, which our rendering avoids, by referring this word to the *head-place* of this bolster, or cushion, and thereby takes the (נ) *from* in its true, and usual construction.

I fear we must add to Saul's other imperfections, a pretty strong adherence to idolatry: for we find in his family the names of *Ish-BAAL*, *Mephi-BAAL*, &c. also, that Michal, his daughter, used Teraphim herself, and *possibly*, thought these were the only things her father would respect. There was need, therefore, to displace this family from the throne, and to introduce a man "who should perform the whole of the divine will;" and who, certainly, whatever faults he had did not fall into idolatry.

5. We read, 2 Kings xxiii. 24. that Josiah put away the Teraphim, together with magic, wizards, and familiar spirits, and all other sins, that were sufficiently open to be discovered, "spied," in our translation: which shews the most thorough reformation within the king's power was attempted, and we may hope was happily accomplished.

6. As to the consulting of his Teraphim, by the king of Babylon, Ezek. xxi. 21. there is no wonder that he should pay such attention to his household gods: and as it referred to the success of his expedition, this action may be illustrated by what Virgil relates of Eneas: at least the representations of Virgil may shew how greatly the Penates were respected anciently; and the confidence placed in them.

*Ædibus in mediis, nudoque sub ætheris axe,
Ingens ara fuit; juxtaque veterrima laurus
Incumbens aræ, atque umbra complexa PENATES.* ÆNEID ii. 515.

Uncover'd but by heav'n, there stood in view
An altar; near the hearth a laurel grew;
Doddered with age, whose boughs encompass round
The HOUSEHOLD GODS, and shade the holy ground. DRYDEN.

*Nox erat, et terris animalia somnus habebat.
Effigies sacræ dicom PHRYGIIQUE PENATES,
Quos mecum a Troja mediisque ex ignibus urbis
Extuleram, visi ante oculos adstare jacentis
Insomnis, multo manifesti lumine, qua se
Plena per insertas fundebat luna fenestras;
Tum sic adfari, et curas his demere dictis:* ÆNEID iii. 148.

The STATUES OF MY GODS, for such they seem'd,
Those GODS whom I from flaming Troy redeem'd,
Before me stood, majestically bright,
Full in the beams of Phœbe's ent'ring light.
Then thus they spoke,——

And we find they gave him advice of the course he was to take in his future wanderings. He also knew them to be his ancestors, by their portraits,

Talibus

*Talibus adtonitus visis, ac voce deorum
(Nec sopor illud erat ; sed coram agnoscere vultus,
Velatasque comas, præsentialiaue ora videbar)——*

I saw, I knew their faces, and descry'd
In perfect view, their hair with fillets ty'd.

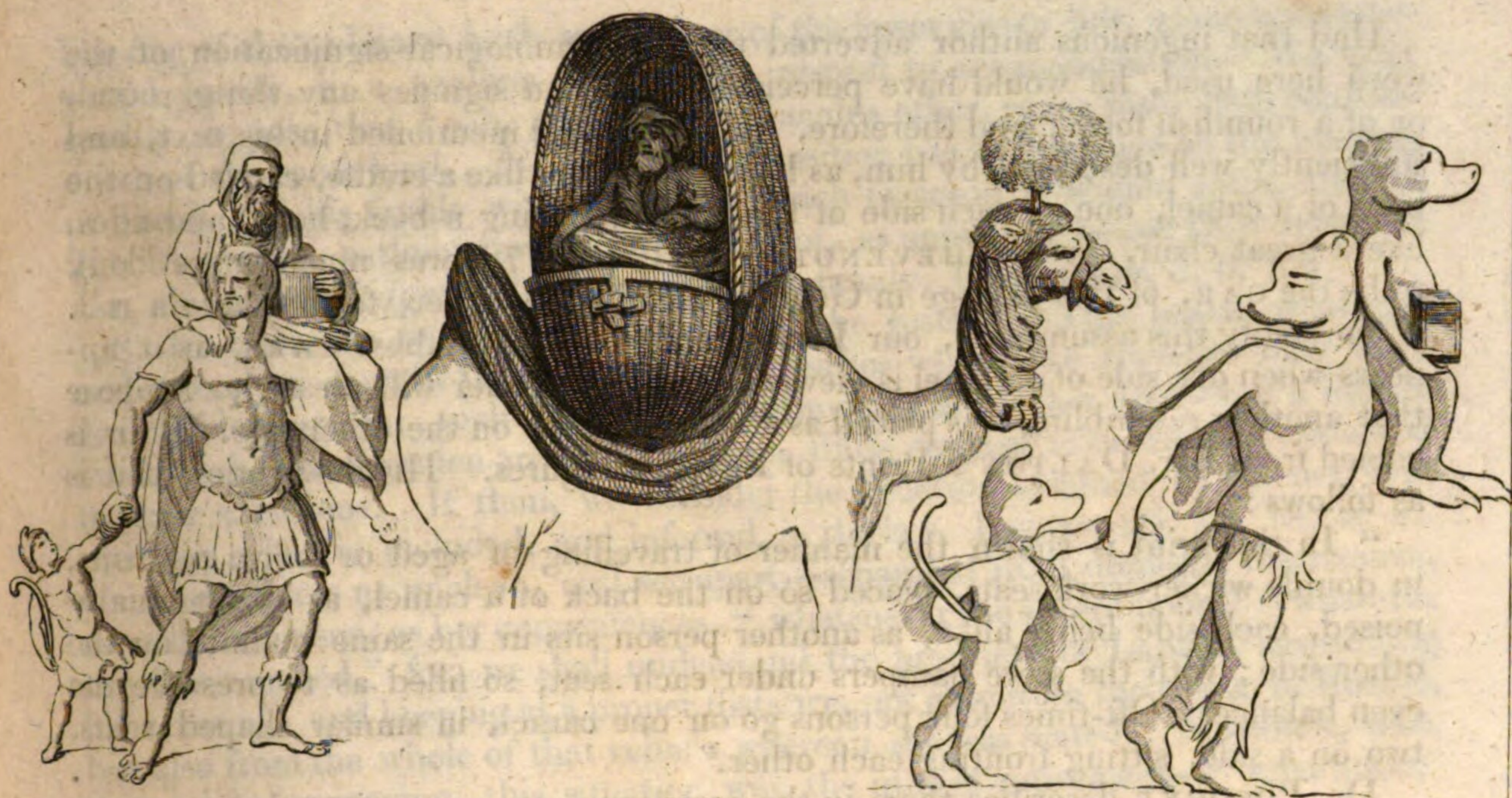
7. The most difficult passage, perhaps, is Hosea iii. 4. “The children of Israel shall abide many days without a king, and without a prince, and without a sacrifice, and without an image, (*matzibeh*, which [FRAGMENT, No. CLXVI.] might refer to a monument of a covenant-sacrifice, or pacificatory-agreement, and does not *necessarily* imply an image) and without an ephod and teraphim.” Here 1. not only the Teraphim are associated with many good things, but 2. the connecting “without” being omitted, they seem to be particularly united with the ephod; as in the instance of Micah. That Israel should be without covenant-monuments, and without household gods, seems perfectly concordant; but that the loss of their Teraphim, should be suggested as a punishment, seems rather strange; unless the passage may mean—without public rites, of appointed religion, and without even their favorite rites, of private superstition; they shall be weaned even from this, which has got so strong hold of them; and which as it should appear from this passage, they still continued. It implies, probably, a depth of distress:—not even their household gods shall be thought of by them.

The Jewish superstitious notion “we are the sons of Abraham, Isaac, and Jacob,” is strongly referable to the principle of Penates, as Gods, Saviours, Protectors, and some of the Rabbins have said things relating to Abraham’s preserving of all his posterity from hell, which exceed by far whatever of protection the ancients attributed to their paternal deities.

.....

On our Plate, Nos. 1, 2, are two views of an Egyptian Isis, in the attitude and character of a household god; sitting, as if she designed never to remove from where she has taken her abode. Nos. 3, 4, 5. are three views of an idol, which answers to the description of a household god; it is sitting; it has moreover, an animal’s head, which may be taken either for that of a dog, or that of a lion, it looks sufficiently watchful, and formidable for either. No. 6. is an Egyptian figure, in which the head is clearly that of a dog: and upon the whole, I suppose, the dog’s head was mostly adopted, at least by the commonalty, or rustics: &c. Possibly, the lion might best please the superior classes, and those who understood the symbol, while the dog best pleased the peasantry, who knew by experience the value of that animal.

The reader will observe, that Nos. 3, 4, 5, are the size of the original, which is of bronze, in the royal collection at Herculaneum, Vol. vi. p. 352. The size, attitude, nature, &c. of these idols, seems to assimilate them very strongly to the Chaldæan *Teraphim*; and as such they may be considered. We do not know of any really Chaldæan or Babylonian antiquities existing; and therefore must content ourselves with the nearest *approximation* in our power: this in the present instance appears to be sufficiently satisfactory, and is now submitted to the acceptance of the reader.



CAMEL'S FURNITURE. *Vide Frag^{ts} N^o DCLXXXVIII.*

CAMEL'S FURNITURE.

GENESIS, chap. xxxi. verse 34.

AMONG those passages of Scripture which demand a knowledge of local peculiarities to render them intelligible, we may justly reckon this; where we read that Rachel purloined the *teraphim* of Laban, her father, "and put them in [or into] the camel's furniture (*בְּעֹר* *becur*, allied to the Latin *currus*, or to our *curricule*: or *becar*, allied, perhaps, to our word *car*, *cart*, *cariage*,) and sat upon them," [or, over them] *i. e.* upon the camel's furniture, which contained them; and she apologised to her father for not rising in his presence, by a plea, which deterred Laban from completing that scrutiny in which he had persevered to this instant, without exception of place, or of person.

Mr. HARMER, Vol. I. p. 446, thinks this *camel's furniture* was "the *thiran*; a piece of serge, about six ells long, laid upon the saddle; . . . it is used as a mattress when they (travellers) stop for the night in a place, on which they lie, and their wallets serve for bolsters." This he confirms by Sir J. CHARDIN'S MS.

Edit. 2.

GENESIS xxxi. 34

Had

Had that ingenious author adverted to the etymological signification of the word here used, he would have perceived, that *car* signifies any thing round, or of a roundish form ; and therefore, that the *courne* mentioned in his text, and sufficiently well described by him, as being a hamper like a cradle, carried on the back of a camel, one on each side of the animal, having a back, head, and sides, like a great chair, (*vide* THEVENOT, Part I. p. 177.) was much more likely to be the *car*, of this passage in Genesis, than any wrapper, formed into a roll.

To justify this assumption, our Print represents one of these *cars*, as it appears when one side of a camel is viewed ; and the reader will please to suppose that another resembling it is placed as a counterpoise, on the other side. This is copied from Mr. DALTON's Prints of Egyptian figures. His description of it is as follows :

“ In this print is shewn the manner of travelling of aged or infirm pilgrims, in double wicker-work seats, placed so on the back of a camel, as to be equally poised, each side being alike, as another person sits in the same manner on the other side ; with the store hampers under each seat, so filled as to preserve the even balance. Oft-times four persons go on one camel, in similar shaped seats, two on a side, sitting fronting each other.”

Dr. POCOCKE describes them in the same manner, comparing them to “ an uncovered chaise, or chair, which is more convenient [than some kind of litters are] as a traveller can sit, and extend his legs, if there is only one person in it. Under the saddle of each camel is a coarse carpet, to cover them by night.” Vol. I. p. 188. This coarse carpet is the *hiran* of Mr. HARMER.

The reader will observe in our Print, 1. the *hiran*, or length of coarse carpet, cloth, or serge, placed on the back of the camel. 2. The round basket which projects over his side, the cover of which shuts down close over it, and is fastened by a strap or buckle, inserted into it. This basket contains the necessaries of the person travelling. 3. The person seated, in much the same manner and attitude, as is usual on the *divan* ; or as he might be seated, if at home ; so that his usual posture is little or nothing varied during his conveyance. 4. The covering over all, which like a kind of roof, keeps off the rays of the sun, excludes rain, &c. The whole is made of wicker-work, for lightness.

This subject gives rise to several reflections, as,

1. “ The riding in vehicles of this kind, is, according to MAILLET, (Lett. p. 230.) a mark of distinction : for speaking of the pilgrimage to Mecca, he says, “ ladies of any figure have litters ; others are carried in chairs made like covered cages, hanging on both sides of a camel ; and ordinary women, are mounted on camels, without such conveniences, after the manner of the Arab women, and cover themselves from sight, and from the heat of the sun, as well as they can, with their veils.”

2. If Rachel journeyed in such a vehicle, then, she was treated with some distinction ; and though not like a person of the very first consequence, yet, not like
like

like one of the ordinary Arab women, or of the lower class : but, as circumstances would justify, in a medium state, with respect to accommodation. We may readily suppose that Leah, and perhaps Jacob's other wives also, had conveniences of the same kind. N. B. This supposition has its influence on the meeting of Jacob and his family with Esau ; on which occasion it should seem, that all Jacob's family, without reserve, were on foot, as appearing before their superior : *i. e.* the *acknowledged* elder brother of the family, Gen. xxxiii. 5, 6, 7.

3. In reference to the circumstances of the history. This basket is always understood to contain those personal necessities which the traveller may need during his journey ; such as linen, refreshments, and other articles of a lighter kind, and, when women are the travellers, those conveniences which are adapted to their situations. If then, we consider the situation assumed by Rachel, and compare what is included, and inferred, in the law, Lev. xv. 26. xx. 18. *et al.* which considers as unclean, and set apart—separated from domestic intercourse, as well the person, as her conveniences, “ whatsoever she sitteth upon,” “ whatever she has touched,” &c. we shall understand the propriety of Laban's suspending his scrutiny, and keeping at a proper distance, not only from the person of Rachel, but also from the whole of that vehicle whereon she was seated. No doubt, also, that while journeying, this situation was the utmost retirement—“ separation,” which Rachel could well assume ; the utmost secrecy and concealment, wherein to deposit her theft, and to hide both herself and her unsuspected acquisition. As Rachel died in child-birth, Gen. xxxv. 16. while on a journey, was it not in one of these same conveyances, [which, with proper attention are capable of being rendered very *private*] so that the same vehicle as had been the scene of her prevarication, became also that of her punishment ?

[I presume that Rebecca, Gen. xxiv. 64. travelled in one of these CARS ; though it be not specified in the text ; “ she lighted off her camel.”]

4. The size of this CAR, or basket, furnishes an inference in regard to the size of the images, *teraphim*, which it concealed : for certainly they were not so large as to fill the whole of it, themselves only : neither were they put in *openly* by Rachel, in the sight of her family ; but were doubtless, wrapped and closely folded in many *envelopes*, for their better secretion and security. This consideration, implies that they were of a small size ; a size which permitted them to be *slipped* undetected, and with other things in their company, *adroitly*, into the CAR, and when in it, to be safe from suspicion, whether occasioned by their weight, or their magnitude. This contributes essentially to justify the statement we have given in reference to the *teraphim* of Michal, 1 Sam. xix. 13. which, if they resembled the *teraphim* of Rachel, as is likely, were neither of a size, nor proportion, to be mistaken for a living man. *Vide* Plate of TERAPHIM, Gen. xxxi. 30.

5. A word which appears to be only the duplicate form of that under explanation, CAR, is employed by the prophet Isaiah, lxvi. 20. and is unluckily rendered by our

our translators, and by others, "*swift beasts*:" they shall bring your brethren . . . on horses . . . and in chariots, and in litters, and upon mules, and upon [*lit. IN*] *swift beasts*—(בְּכַרְכָּרוֹת BECARCARUTH)—now this word is employed by the prophet in the duplicate form, because, as we have observed, these *CARS* are swung, one on each side of the camel, therefore they may be considered as plural, and a word in the plural form best denotes them. Moreover, it is said, they shall be "brought for an offering,"—exactly then, as pilgrims now go to Mecca;—from one of whom our Plate is taken. From hence we conclude, that vehicles of this form and construction, were used in religious processions, in the days of Isaiah; as they now are, in the countries, and among the people, to which he refers.

N. B. This justifies the idea of *VITRINGA*, against Mr. *HARMER*.

By way of ascertaining the size of the *teraphim*, which we have supposed to resemble the *dii penates*, we have given from a gem, the group of Eneas carrying his father Anchises, who holds in his hands the box in which he conveyed away his household gods, or the *palladium*: this box is not large. And further, we have given a caricature delineation of the same subject, from an ancient picture in Herculaneum, wherein Eneas and his family are represented as dogs; in this also the *lararium* is but small; and might easily be furtively conveyed away, among other things, in a *CAR*.

There are two gems in the Florentine Gallery, Plate XXX. Vol. II. which represent the same subject, of the flight of Eneas, and so nearly the same figures, that I doubt not, but they are copies from some famous group of statuary, representing this incident: from one of these our Plate is copied. The reader will recollect that the Romans derived their origin from Troy, from whence Eneas is carrying off his father and his divinities. In fact, Eneas, and Anchises his father, were deemed little, if any thing, short of protecting deities at Rome; and therefore the *caricaturing* them under the form of *dogs*, though it shews what liberties the ancients took with their deities, yet is not the worst character into which they might have been metamorphosed; as the dog was a proper emblem of the *penates*-Gods; and his figure was a customary allusion to their offices. *Vide* the Plate of *TERAPHIM*, Gen. xxxi 30. and Virgil's *Eneid*, &c. as referred to on that subject.

Apuleius mentions a practice not unlike this contrivance of Rachel; he says, *Apol. p. 72.* "It is my custom, let me go wherever I will, to carry with me among my boxes, (or trunks) the image of a deity." It is clear that these images could be but of small dimensions. Moreover, we well know, that figures of protecting deities were worn about the person; whence Arnobius, *contra Gentes*, lib. vii. takes occasion to say, "Do not imagine that every little image is a Divinity." We read, also, that the Rhodians went out in a body to meet certain small images, which they placed on cushions; not the least wonder of which procession was the great veneration paid to such small objects. *Nihil hac memoriâ felicius, quæ tantum venerationis in tam parvula ære possedit.* VAL. MAX. lib. ii. cap. 10.





NAPTHALI. GENESIS Ch. XLIX, ver. 21.

NAPHTHALI

GENESIS 35: 11

NAPHTHALI IS A SPREADING TREE
HE GIVETH VENUE UNTO HIS BROTHERS

THAT this passage requires illustration will be manifest, from a consideration of its grammar, or meaning. Naphtali is a spreading tree, says the Vulgate. "He," the sign of the masculine gender, "giveth venue unto his brothers," here both masculine and feminine; but in what sense can a tree give venue, whether male or female, he giveth venue? and when did a deer speak? and speak, too, with propriety? and what idea can a reader annex to this passage—what is the sense of the words, and the propriety of the parts?—How does the allusion connect with the subsequent situation or history of this tribe?

We receive but little assistance from the versions, ancient or modern. The Vulgate, one of the Greek versions, the Persian, the Arabic, &c. all render, "Naphthali is a spreading (terebinthine) tree, giving beautiful verdure." This renders the simile uniform; but the allusion to a tree seems to be improper, suggested by the venerable patriarch for his son Joseph, who is compared to the spreading of a tree. Now Joseph would be assimilated to an inferior object, if compared to a tree. Had he been compared to a parent tree before him, the repetition would have been more proper.

Those who support the Hebrew points, and the opinion of the ancient versions, i. e. the present reading, support the former opinion, that it is a spreading tree. They say also, that the idea of a tree is very general, and very ancient, and has become the characteristic of a tribe; and that it is equally applicable to all the tribes. Gen. 12: 6. The Vulgate has suggested later interpreters to identify this tree as the terebinthine.

It is known, also, that the Hebrew word, *al*, is the usual name, for a tree. The Greeks seem to have changed this word, by putting a hard sounder before it. *Al* is *Ala*. Hence Hesychius says, *al* is *al*. The Chaldee and the Arab. The Arabs write *al*, *igul*, &c.

Having seen, though briefly, the embarrassment of interpreters, let us try to find assistance we may derive from Natural History, toward explaining this passage.

1. I conceive the word *al* may, like our word Deer, be applicable to either sex, though custom might appropriate it to one sex; as we do not always, in common speech, distinguish the sexes of domestic animals, as horses, dogs, &c. nor of wild animals, rats, polecats, bears, &c. The word *al* does not denote the species, as we have several kinds of deer, as the *al* and the *al*. Gen. 12: 6.



Antelope heads - 1871

NAPTHALI.

GENESIS XLIX. 21.

NAPTHALI IS A HIND LET LOOSE:

HE GIVETH GOODLY WORDS.

THAT this passage requires illustration will be evident, from a slight examination of its grammar, or meaning. Napthali is a *hind*—a *hind* is a *female* deer: “He,” the sign of the *masculine* gender, “giveth goodly words.” Napthali is here both masculine and feminine: but in what sense can it be said of a deer, whether male or female, he giveth *words*? And how are these words *goodly*? When did a deer speak? and speak, too, with propriety and elocution?—What idea can a reader annex to this passage?—where is the unity of the whole, or the propriety of the parts?—How does this allusion correspond with Nature, or with the subsequent situation or history of this tribe?

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It is certain, also, that the Hebrew *ail*, אֵיל, is the usual name, for a stag. The Greeks seem to have changed this word, by prefixing a hard sounding letter, D, *Dial*. Hence Hesychius says, *Διαλ την ελαφον Χαλδαιοι*: *The Chaldeans call a deer Dial*. The Arabs write *jial*, *igial*, &c.

Having seen, though briefly, the embarrassment of interpreters, let us try what assistance we may derive from Natural History, toward explaining this passage.

1. I conceive the word *Aileh* may, like our word *Deer*, be applicable to either sex, though custom might appropriate it to one sex; as we do not always correctly, in common speech, distinguish the sexes of domestic animals, sheep, goats, horses, dogs, &c.: or of wild animals, rats, wolves, bears, &c. So our word *deer* does not denote the *species*, as we have several kinds of deer, nor the sex, &c.: and the

GEN. XLIX. 21.

Greek

*Talibus adtonitus visis, ac voce deorum
(Nec sopor illud erat ; sed coram agnoscere vultus,
Velatasque comas, præsentiæque ora videbar)——*

I saw, I knew their faces, and descry'd
In perfect view, their hair with fillets ty'd.

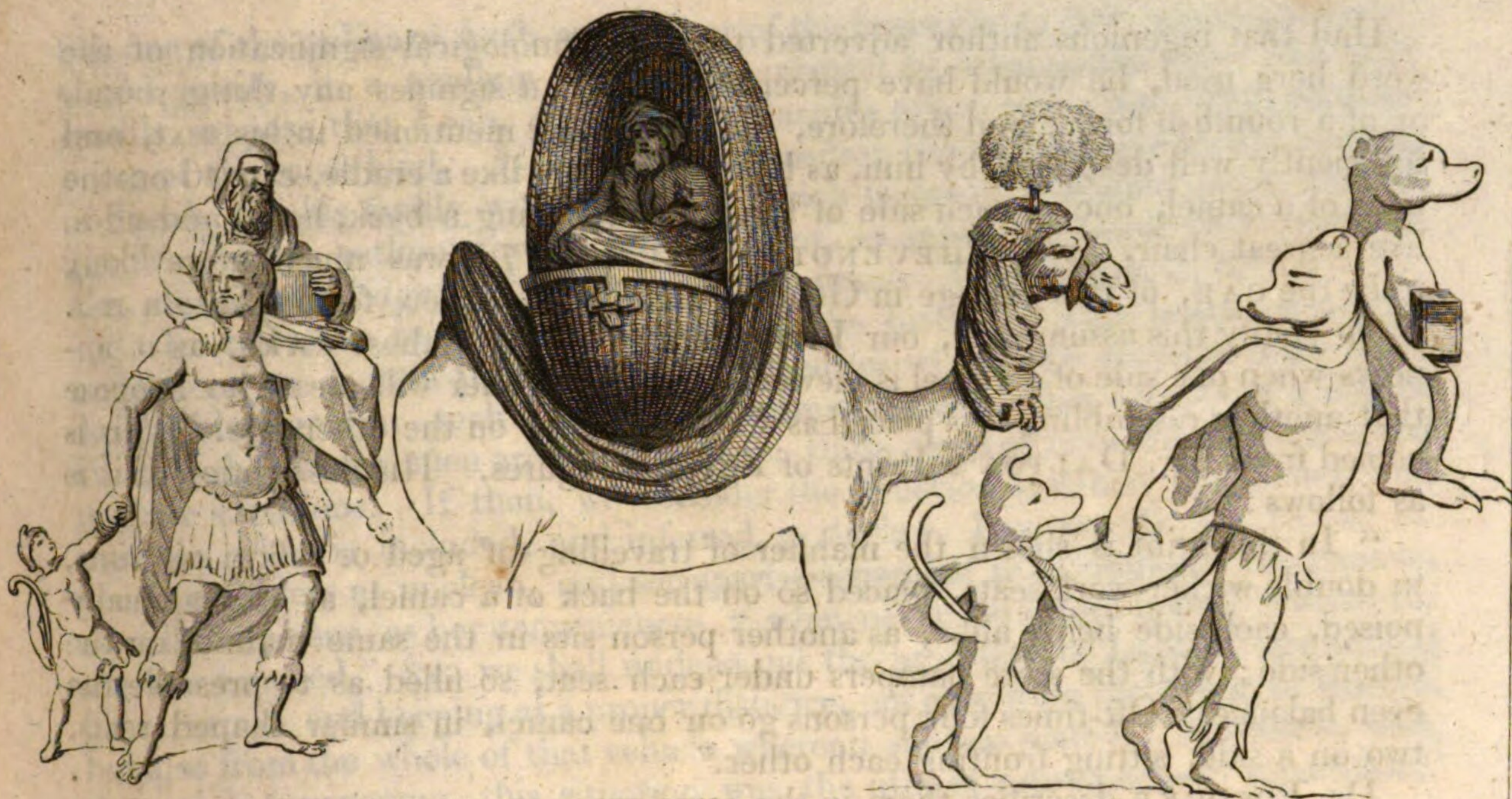
7. The most difficult passage, perhaps, is Hosea iii. 4. "The children of Israel shall abide many days without a king, and without a prince, and without a sacrifice, and without an image, (*matzibeh*, which [FRAGMENT, No. CLXVI.] might refer to a monument of a covenant-sacrifice, or pacificatory-agreement, and does not *necessarily* imply an image) and without an ephod and teraphim." Here 1. not only the Teraphim are associated with many good things, but 2. the connecting "without" being omitted, they seem to be particularly united with the ephod; as in the instance of Micah. That Israel should be without covenant-monuments, and without household gods, seems perfectly concordant; but that the loss of their Teraphim, should be suggested as a punishment, seems rather strange; unless the passage may mean—without public rites, of appointed religion, and without even their favorite rites, of private superstition; they shall be weaned even from this, which has got so strong hold of them; and which as it should appear from this passage, they still continued. It implies, probably, a depth of distress:—not even their household gods shall be thought of by them.

The Jewish superstitious notion "we are the sons of Abraham, Isaac, and Jacob," is strongly referable to the principle of Penates, as Gods, Saviours, Protectors, and some of the Rabbins have said things relating to Abraham's preserving of all his posterity from hell, which exceed by far whatever of protection the ancients attributed to their paternal deities.

.....

On our Plate, Nos. 1, 2, are two views of an Egyptian Isis, in the attitude and character of a household god; sitting, as if she designed never to remove from where she has taken her abode. Nos. 3, 4, 5. are three views of an idol, which answers to the description of a household god; it is sitting; it has moreover, an animal's head, which may be taken either for that of a dog, or that of a lion, it looks sufficiently watchful, and formidable for either. No. 6. is an Egyptian figure, in which the head is clearly that of a dog: and upon the whole, I suppose, the dog's head was mostly adopted, at least by the commonalty, or rustics: &c. Possibly, the lion might best please the superior classes, and those who understood the symbol, while the dog best pleased the peasantry, who knew by experience the value of that animal.

The reader will observe, that Nos. 3, 4, 5, are the size of the original, which is of bronze, in the royal collection at Herculaneum, Vol. vi. p. 352. The size, attitude, nature, &c. of these idols, seems to assimilate them very strongly to the Chaldæan *Teraphim*; and as such they may be considered. We do not know of any really Chaldæan or Babylonian antiquities existing; and therefore must content ourselves with the nearest *approximation* in our power: this in the present instance appears to be sufficiently satisfactory, and is now submitted to the acceptance of the reader.



CAMEL'S FURNITURE. *Vide Frag^{ts} N^o DCLXXXVIII.*

CAMEL'S FURNITURE.

GENESIS, chap. xxxi. verse 34.

AMONG those passages of Scripture which demand a knowledge of local peculiarities to render them intelligible, we may justly reckon this; where we read that Rachel purloined the *teraphim* of Laban, her father, "and put them in [or into] the camel's furniture (בֵּעֻר *becur*, allied to the Latin *currus*, or to our *curricl*: or *becar*, allied, perhaps, to our word *car*, *cart*, *cariage*,) and sat upon them," [or, over them] *i. e.* upon the camel's furniture, which contained them; and she apologised to her father for not rising in his presence, by a plea, which deterred Laban from completing that scrutiny in which he had persevered to this instant, without exception of place, or of person.

Mr. HARMER, Vol. I. p. 446, thinks this *camel's furniture* was "the *thiran*; a piece of serge, about six ells long, laid upon the saddle; . . . it is used as a mattress when they (travellers) stop for the night in a place, on which they lie, and their wallets serve for bolsters." This he confirms by Sir J. CHARDIN'S MS.

Edit. 2.

GENESIS xxxi. 34

Had

Had that ingenious author adverted to the etymological signification of the word here used, he would have perceived, that *CAR* signifies any thing round, or of a roundish form ; and therefore, that the *coune* mentioned in his text, and sufficiently well described by him, as being a hamper like a cradle, carried on the back of a camel, one on each side of the animal, having a back, head, and sides, like a great chair, (*vide* THEVENOT, Part I. p. 177.) was much more likely to be the *CAR*, of this passage in Genesis, than any wrapper, formed into a roll.

To justify this assumption, our Print represents one of these *CARS*, as it appears when one side of a camel is viewed ; and the reader will please to suppose that another resembling it is placed as a counterpoise, on the other side. This is copied from Mr. DALTON's Prints of Egyptian figures. His description of it is as follows :

“ In this print is shewn the manner of travelling of aged or infirm pilgrims, in double wicker-work seats, placed so on the back of a camel, as to be equally poised, each side being alike, as another person sits in the same manner on the other side ; with the store hampers under each seat, so filled as to preserve the even balance. Oft-times four persons go on one camel, in similar shaped seats, two on a side, sitting fronting each other.”

Dr. POCOCKE describes them in the same manner, comparing them to “ an uncovered chaise, or chair, which is more convenient [than some kind of litters are] as a traveller can sit, and extend his legs, if there is only one person in it. Under the saddle of each camel is a coarse carpet, to cover them by night.” Vol. I. p. 188. This coarse carpet is the *hiran* of Mr. HARMER.

The reader will observe in our Print, 1. the *hiran*, or length of coarse carpet, cloth, or serge, placed on the back of the camel. 2. The round basket which projects over his side, the cover of which shuts down close over it, and is fastened by a strap or buckle, inserted into it. This basket contains the necessaries of the person travelling. 3. The person seated, in much the same manner and attitude, as is usual on the *divan* ; or as he might be seated, if at home ; so that his usual posture is little or nothing varied during his conveyance. 4. The covering over all, which like a kind of roof, keeps off the rays of the sun, excludes rain, &c. The whole is made of wicker-work, for lightness.

This subject gives rise to several reflections, as,

1. “ The riding in vehicles of this kind, is, according to MAILLET, (Lett. p. 230.) a mark of distinction : for speaking of the pilgrimage to Mecca, he says, “ ladies of any figure have litters ; others are carried in chairs made like covered cages, hanging on both sides of a camel ; and ordinary women, are mounted on camels, without such conveniences, after the manner of the Arab women, and cover themselves from sight, and from the heat of the sun, as well as they can, with their veils.”

2. If Rachel journeyed in such a vehicle, then, she was treated with some distinction ; and though not like a person of the very first consequence, yet, not like

like one of the ordinary Arab women, or of the lower class : but, as circumstances would justify, in a medium state, with respect to accommodation. We may readily suppose that Leah, and perhaps Jacob's other wives also, had conveniences of the same kind. N. B. This supposition has its influence on the meeting of Jacob and his family with Esau ; on which occasion it should seem, that all Jacob's family, without reserve, were on foot, as appearing before their superior : *i. e.* the *acknowledged* elder brother of the family, Gen. xxxiii. 5, 6, 7.

3. In reference to the circumstances of the history. This basket is always understood to contain those personal necessities which the traveller may need during his journey ; such as linen, refreshments, and other articles of a lighter kind, and, when women are the travellers, those conveniences which are adapted to their situations. If then, we consider the situation assumed by Rachel, and compare what is included, and inferred, in the law, Lev. xv. 26. xx. 18. *et al.* which considers as unclean, and set apart—separated from domestic intercourse, as well the person, as her conveniences, “ whatsoever she sitteth upon,” “ whatever she has touched,” &c. we shall understand the propriety of Laban's suspending his scrutiny, and keeping at a proper distance, not only from the person of Rachel, but also from the whole of that vehicle whereon she was seated. No doubt, also, that while journeying, this situation was the utmost retirement—“ separation,” which Rachel could well assume ; the utmost secrecy and concealment, wherein to deposit her theft, and to hide both herself and her unsuspected acquisition. As Rachel died in child-birth, Gen. xxxv. 16. while on a journey, was it not in one of these same conveyances, [which, with proper attention are capable of being rendered very *private*] so that the same vehicle as had been the scene of her prevarication, became also that of her punishment ?

[I presume that Rebecca, Gen. xxiv. 64. travelled in one of these CARS ; though it be not specified in the text ; “ she 'lighted off her camel.”]

4. The size of this CAR, or basket, furnishes an inference in regard to the size of the images, *teraphim*, which it concealed : for certainly they were not so large as to fill the whole of it, themselves only : neither were they put in *openly* by Rachel, in the sight of her family ; but were doubtless, wrapped and closely folded in many *envelopes*, for their better secretion and security. This consideration, implies that they were of a small size ; a size which permitted them to be *slipped* undetected, and with other things in their company, *adroitly*, into the CAR, and when in it, to be safe from suspicion, whether occasioned by their weight, or their magnitude. This contributes essentially to justify the statement we have given in reference to the *teraphim* of Michal, 1 Sam. xix. 13. which, if they resembled the *teraphim* of Rachel, as is likely, were neither of a size, nor proportion, to be mistaken for a living man. *Vide* Plate of TERAPHIM, Gen. xxxi. 30.

5. A word which appears to be only the duplicate form of that under explanation, CAR, is employed by the prophet Isaiah, lxvi. 20. and is unluckily rendered by our

our translators, and by others, "*swift beasts*:" they shall bring your brethren . . . on horses . . . and in chariots, and in litters, and upon mules, and upon [*lit. IN*] *swift beasts*—(בכרכרות BECARCARUTH)—now this word is employed by the prophet in the duplicate form, because, as we have observed, these CARS are swung, one on each side of the camel, therefore they may be considered as plural, and a word in the plural form best denotes them. Moreover, it is said, they shall be "brought for an offering,"—exactly then, as pilgrims now go to Mecca;—from one of whom our Plate is taken. From hence we conclude, that vehicles of this form and construction, were used in religious processions, in the days of Isaiah; as they now are, in the countries, and among the people, to which he refers.

N. B. This justifies the idea of VITRINGA, against Mr. HARMER.

By way of ascertaining the size of the *teraphim*, which we have supposed to resemble the *dii penates*, we have given from a gem, the group of Eneas carrying his father Anchises, who holds in his hands the box in which he conveyed away his household gods, or the *palladium*: this box is not large. And further, we have given a caricature delineation of the same subject, from an ancient picture in Herculaneum, wherein Eneas and his family are represented as dogs; in this also the *lararium* is but small; and might easily be furtively conveyed away, among other things, in a CAR.

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NAPTHALI. GENESIS. Ch. XLIX, ver. 21.

NAPHTALI

GENESIS XXXII

NAPHTALI IS GIVEN THE NAME

HE GIVETH HIMSELF NAME

THAT this passage requires illustration will be manifest from a consideration of its grammar, or meaning. *Naphtali* is a word which, in the Hebrew, signifies "He," the sign of the masculine gender. "He" is a word which, in the Hebrew, signifies both masculine and feminine; but in what sense can it be used here, whether male or female, he giveth himself? and how can it be used here? When did a deer speak? and speak, too, with propriety? and how can the idea can a reader annex to this passage?—What is the unity of the passage? the propriety of the parts?—How does this situation correspond with the subsequent situation or history of this tribe?

We receive but little assistance from the versions, and less from the Vulgate, one of the Greek versions, the Peshitta, the Syriac, &c. &c. considering. The LXX. Bochart, Houbigant, De Sautai, Dabry, &c. &c. render "Naphtali is a spreading (terebinthine) tree, giving beautiful blossoms." This renders the simile uniform; but the allusion to a tree seems to be peculiar to Joseph by the venerable patriarch for his son Joseph, who is compared to the spreading of a tree. Now Joseph would be assimilated to an inferior object, if Naphtali had been compared to a parent tree before him; the repetition here is not striking.

Those who support the Hebrew points, and the opinion of the ancient versions, i. e. the present reading, support the former opinion. They say also, that the idea of a tree is not general, and is not peculiar to Joseph, but become the characteristic of a tribe; that is, the tribe of Naphtali, which is equally to all the tribes. Gen. xli. 21. This has engaged later interpreters to identify this tree as the terebinthine.

It is certain, also, that the Hebrew *al*, *al*, is the usual name, for a tree. The Greeks seem to have changed this word, by putting a hard sound before it. *Al*, *al*. Hence Hesychius says, *al*, *al*. The Chaldeans call it *al*. The Arabs write *al*, *igul*, &c.

Having seen, though briefly, the embarrassments of interpreters, let us try what assistance we may derive from Natural History, in explaining this passage.

I conceive the word *al* may, like the word *Ocer*, be applicable to either sex, though custom might appropriate it to one sex; as we do not usually, in common speech, distinguish the sexes of deer, antelope, &c. &c. horses, dogs, &c. nor of wild animals, rats, foxes, bears, &c. &c. The word *al* denotes the species, as we have several kinds of deer, &c. &c. and the



NAPTHALI.

GENESIS XLIX. 21.

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THAT this passage requires illustration will be evident, from a slight examination of its grammar, or meaning. Napthali is a *hind*—a *hind* is a *female* deer: “He,” the sign of the *masculine* gender, “giveth goodly words.” Napthali is here both masculine and feminine: but in what sense can it be said of a deer, whether male or female, he giveth *words*? And how are these words *goodly*? When did a deer speak? and speak, too, with propriety and elocution?—What idea can a reader annex to this passage?—where is the unity of the whole, or the propriety of the parts?—How does this allusion correspond with Nature, or with the subsequent situation or history of this tribe?

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Greek *elaphos* denotes a deer, *i. e.* either a *stag* or a *hind*. The Latin also looks the same way; *dama*, a deer, a fallow deer, whether buck or doe: and Dr. SHAW, Travels, 414, 4to. understands the whole *genus* of deer, as included in the word *Ail*, though this *genus* comprises many *species*. Our professed naturalists, also, accommodate themselves in their writings to this manner of expression. GOLD-SMITH has a division “Of the COW kind;” under which he includes *bulls*, no doubt: but PENNANT is worse still, for he has a division “Of the OX;” under which he includes both *bulls* and *cows*, which is certainly improper, since *bulls* or *cows* are not *oxen*, neither are *oxen* *bulls* or *cows*, but mutilations.

2. The word rendered *let loose* (שלח) imports an active motion, not like that of the branches of a tree, which, however freely they wave, are yet attached to the parent, but an *emission*, a *dismissal*, a *sending forth*; in the present case a *roaming*—roaming at liberty.

3. *He giveth*. This word may denote *shooting forth*: it is used of production; as of the earth, which shoots forth, yields—her increase, Lev. xxiv. 4. So trees shoot forth branches, Psalm viii. 7. Prov. xii. 12; and so to *place*, *set* or *appoint*.

4. *Goodly words*. Other versions render “beautiful branches,” and we acquiesce in their idea. The word rendered *goodly* signifies *majestic*, *noble*, *grand*, *magnificent*: and the word rendered *branches* radically signifies to *diverge*, to *spread forth*. The passage, translated on these principles, will read thus—

Napthali is a deer roaming at liberty,
He shooteth forth noble branches [*majestic antlers.*]

The English word *branches* is applied to the stag, with exactly the same allusion as the Hebrew word: the French say *bois* (wood) for a stag's horns. The horns of a *stag* are annually shed, and annually reproduced; they are ample, if his pasturage has been plentiful and nutritious; or are stunted in their growth, if his food has been sparing, or deficient in nourishment. BUFFON reasons at length on this subject, Art. CERF.—“There is so intimate a relation between nutrition and the production of the antlers, &c. that we have formerly established *its entire dependance on a superabundance of nourishment*. In animals in general, and in the stag in particular, this superabundance shews itself by the most evident effects; *it produces the horns*, the swelling of the throat, the accretion of fat, &c. After the first year, in the month of May, the horns begin to shoot, and form two projections, which lengthen and harden, *in proportion as the animal takes nourishment* . . . This effect [of nourishment] appears especially on the summit of the head, where it manifests itself more than every where else, by the production of the horns . . . Another proof that the production of the horns arises wholly from the superabundance of nourishment, is the difference which is found between the horns of stags of the same age, of which some are very thick, and spreading, while others are thin and slender, which depends absolutely on the quantity of nourishment; for a stag which inhabits a plentiful country, where he feeds at his will; where he is not molested by dogs or by men; where, having eaten

eaten quietly, he may afterwards ruminate at his ease, will always shew a head beautiful, high, and spreading; palms large and well furnished; the stem of his horns thick, well pearled, with numerous antlers long and strong: whereas, he who inhabits a country where he has neither quiet nor nourishment sufficient, will shew but an impoverished head, few antlers, and feeble stems; INSOMUCH, THAT IT IS ALWAYS EASY TO DETERMINE, BY EXAMINING THE HEAD OF A STAG, WHETHER HE INHABITS A PLENTIFUL AND QUIET COUNTRY, AND WHETHER HE HAS BEEN WELL OR ILL FED."

We now direct these remarks to the prediction of Jacob: "Naphthali shall inhabit a country so rich, so fertile, so quiet, so unmolested, that, after having fed to the full, on the most nutritious pasturage, he shall shoot out branches, i. e. antlers, &c. of the most majestic magnitude." Thus does the patriarch denote the happy lot of Naphthali; not directly, but indirectly; not by the energy of immediate description, but by inevitable inference, arising from observation of its effects. In fact the lot of this tribe was rich in pasture, and "his soil," as CALMET observes, "was very fruitful in corn and oil." So that we have both correct verbal propriety, and subsequent fulfilment of the prophecy, in favour of this interpretation of this passage.

The residence of Naphthali was a beautiful woodland country; it extended to Mount Lebanon, and produced fruits of every sort.—Moses says, *Deut.* xxxiii. 23. Naphthali shall enjoy abundance of favour, and be filled with the blessings of the Lord. Josephus, *de Bello*, lib. iii. cap. 2. speaks highly of the fertility of Galilee, which comprised the lot of Naphthali; and, *de Vita sua*. p. 1017, he reckons two hundred and fourteen towns in this province.

We consider the source of the Jordan as rising in Naphthali; and from the name of the city near which it rose, *Paneas*, (thought to originate from the deity *Pan*) we may infer the nature of the country; for *Pan*, as the god of rural economics, delighted in woodlands, forests, groves, &c.—and William, Archbishop of Tyre, in his History of the Holy Wars, lib. xviii. cap. 2. informs us, that there was around this city a vast forest, called in his time the forest of *Paneades*. It was adapted to feed and fatten flocks; and a prodigious number of Arabs and Turcomans, after a convention of peace with Godfrey of Boulogne, by permission of that hero, entered and resided in this forest, with their flocks and cattle; among which, says the historian, there was an infinite number of horses.

This forest extended even to Mount Hermon, as the writer last quoted observes; and he supposes it to be a part or continuation of the famous forest of Lebanon. It needs little proof that such a country was likely to yield abundance of nourishment, adapted for deer, which might display its prolific effects in the growth and magnitude of the horns, and their branches; so that this country might *literally* fulfil the patriarch's blessing, which is not always to be expected in *figurative* language. It may be added, that about a mile distant from *Paneas*, stood Laish or Dan, the inhabitants of which dwelt therein careless, quiet, and secure, Judges, xviii. 7. which implies a plentiful country, to say the least.

Of

Of the adjacent district of Kesroan, which Volney tells us is similar to this side of Mount Lebanon, LE ROQUE says, p. 220, " Nothing equals the fertility of the lands in Kesroan: mulberry-trees for the silk-worms; vineyards, whose wine is excellent; olive-trees tall as oaks; meadows, pasturages, corn, and fruit of all kinds. Such are the riches of this agreeable country, which besides abounds in cattle, large and small, in birds of game, and in *beasts of chace*. So beautiful a country, situated in a climate which I think is the mildest and most temperate of Syria, seems to contribute, in some manner, to the kindness of disposition, to the gentle inclinations, and to the praiseworthy manners of the inhabitants.

He proceeds to say yet stronger things of the inhabitants of that country, whereof he is particularly speaking; but, I presume, what has been offered to the reader is sufficient to justify the patriarch Jacob in allegorizing the character and the situation of Napthali, under an allusion to a deer, rather than to any wild beast of a savage and ferocious nature, as he does some of his other children.

Some have supposed, that the branching horns of this deer allegorically denote fertility in children; and have remarked, that though only four sons are reckoned to Napthali, when he went down to Egypt, Gen. xlv. 24. yet his tribe at the Exodus numbered above 50,000 men.

There is therefore no necessity for recurring to the simile of a tree, in order to reduce this passage to clear and simple meaning: neither are we obliged to retain the mistaken rendering of our public translation, which presents us with an *impossibility*, and a *contradiction*.

EXPLANATION OF THE PLATE.

The figures are from RIDINGER, a famous German painter of animals.

A. The head of a *hind*, or *female* deer, which sex *usually* has no horns; though some have been found with small horns; probably from ample feeding. The attitude of this figure is listening, braying at the same time.

B. A stag of four years old; at which period he is well able to seek his own provision, and to roam at large in the forest. The antlers, with which he is furnished, are now in fair condition, and not unequal to those of the generality of his age and species.

C. The head of a stag, which, from having fed at pleasure in one of the forests of Germany, has acquired very large antlers, very thick stems, very broad horns, and so spreading, that the points they form amount to no less a number than SIXTY-SIX. Let him, then, stand as a proof of the effects of liberty and plenty, like the son of Jacob, to whom he forms an object of comparison.

NAPTHALI IS A DEER ROAMING FREELY IN THE FERTILE FOREST;

And, by the effect of plentiful feeding,

SHOOTING OUT AMPLE ANTLERS! [*majestic branches.*]

OF THE CERASTES, AND SIMILAR SERPENTS.

THE CERASTES, or horned Viper, is among the most fatal of the serpent tribe. It is, moreover, well distinguished from all others, by the peculiarity of its horns; and it is abundant in Egypt and in Syria, so that it could not escape the notice and allusions of the sacred writers. I believe it is agreed, on all hands, that this serpent is mentioned in Scripture; but the difficulty is, to determine which of the Hebrew appellations of serpents describes this species.

Mr. BRUCE has a figure of the Cerastes, with a considerable account of its manners; part of which we extract. He says, "There is no article of natural history the ancients have dwelt on more than that of the Viper, whether poets, physicians, or historians. All have enlarged on the particular sizes, colours, and qualities, yet the knowledge of their manners is but little extended.

"I have travelled across the Cyrenaicum in all its directions, and never saw but one species of Viper, which was the Cerastes, or horned Viper, now before us: neither did I ever see any of the snake kind that could be mistaken for the Viper.

"The Basilisc is a species of serpent, frequently made mention of in Scripture, though never described, farther than that he cannot be charmed, so as to do no hurt; nor trained, so as to delight in music; which all travellers who have been in Egypt know is exceeding possible, and frequently seen. "For behold I will send Basiliscs among you," saith the Scripture, which will not be charmed; "and they shall bite you, saith the Lord." [Jerem. viii. 17.] And [Psalm ix. 13.] "Thou shalt tread upon the lion and Basilisc," &c. It is to be observed here, it is the Greek text that calls it Basilisc: the Hebrew, for the most part, calls it *tsepha*, which are a species of serpents real and known. Our English translation, very improperly, renders it *Cockatrice*; a fabulous animal, that never did exist. I shall only further observe, that the Basilisc, in scripture, would seem to be a *snake*, not a Viper, as there are frequent mention made of their eggs, as in Isaiah, chap. lxix. 5.; whereas it is known to be the characteristic of the Viper to bring forth *living* young.

"I shall mention one name more, under which the Cerastes goes, because it is equivocal, and has been misunderstood in Scripture; that is *tseboa*, which name is given it in Hebrew from its different colours and spots. And hence the Greeks, [Elian, Hist. lib. i. cap. 25. Hor. A. Hieroglyph. lib. ii. cap. 65.] have called it by the name of *hyana*; because it is of the same reddish colour, marked with black spots, as that quadruped is. And the same fable is applied to the serpent and the quadruped, that they change their sex yearly.

"The Cerastes is mentioned by name in Lucan, and without warranting the separate existence of any of the rest, I can see several that are but the Cerastes under another term. The *Thebanus Ophites*, the *Ammodytes*, the *Torrida Dipsas*, and the *Prester* [Lucan, lib. ix.] all of them are but this viper described from the form of its parts, or its colours. The Cerastes hides itself all day

day in holes in the sand, where it lives in contiguous and similar houses to those of the jerboa; and I have already said, that I never but once found any animal in this viper's belly, but one jerboa, in a gravid female Cerastes.

"I kept two of these last-mentioned creatures in a glass jar, such as is used for keeping sweetmeats, for two years, without having given them any food: they did not sleep, that I observed, in winter, but cast their skins the last days of April.

"The Cerastes moves with great rapidity, and in all directions, forward, backward, and sideways. When he inclines to surprise any one who is too far from him, he creeps with his side towards the person, and his head averted, till judging his distance, he turns round, springs upon him, and fastens upon the part next to him; for it is not true what is said, that the Cerastes does not leap or spring. I saw one of them at Cairo, in the house of Julian and Rosa, crawl up the side of a box, in which there were many, and there lie still as if hiding himself, till one of the people who brought them to us came near him, and though in a very disadvantageous posture, sticking, as it were, perpendicular to the side of the box, he leaped near the distance of three feet, and fastened between the man's fore-finger and thumb, so as to bring the blood. The fellow shewed no signs of either pain or fear; and we kept him with us full four hours, without applying any sort of remedy, or his seeming inclined to do so.

"To make myself assured that the animal was in its perfect state, I made the man hold him by the neck, so as to force him to open his mouth, and lacerate the thigh of a pelican, a bird I had tamed, as big as a swan. The bird died in about 13 minutes, though it was apparently affected in 50 seconds; and we cannot think it was a fair trial, because a very few minutes before it had bit, and so discharged part of its virus, and it was made to scratch the pelican by force, without any irritation, or action of its own.

"The Cerastes inhabits the greater part of the continent, especially the desert sandy parts of it. It abounds in Syria, in the three Arabias, and in Africa, I never saw so many of them as in the Cyrenaicum, where the jerboa is frequent in proportion. He is a great lover of heat; for though the sun was burning hot all day, when we made a fire at night, by digging a hole and burning wood to charcoal in it, for dressing our victuals, it was seldom we had fewer than half a dozen of these vipers, who burnt themselves to death by approaching the embers.

"Galen speaking of the *Aspic* in the great city of Alexandria, says, I have seen how speedily they (the *Aspics*) occasioned death. Whenever any person is condemned to die, whom they wish to end quickly and without torment, they put the Viper to his breast, and suffering him there to creep a little, the man is presently killed. Pausanias speaks of particular serpents that were to be found in Arabia among the balsam-trees, several of which I procured both alive and dead, when I brought the tree from Beder Hunein; but they were still the same species of serpent, only some from sex, and some from want of age, had not the horns, though in every other respect they could not be mistaken.

Ibn

Ibn Sina, called by Europeans Avicenna, has described this animal very exactly: he says it is frequent in Shem, (that is, the country about and south of Damascus) and also in Egypt; and he makes a very good observation on their manners: that they do not go or walk straight, but move by contracting themselves.

“ The general size of the Cerastes, from the extremity of its snout to the end of its tail, is from 13 to 14 inches. Its head is triangular, very flat, but higher near where it joins the neck than towards the nose.

“ The Cerastes has sixteen small immoveable teeth, and in the upper jaw two canine teeth, hollow, crooked inward, and of a remarkable fine polish, white in colour, inclining to blueish. Near one-fourth of the bottom is strongly fixed in the upper jaw, and folds back like a clasp knife, the point inclining inwards; and the greatest part of the tooth is covered with a green soft membrane, not drawn tight, but, as it were, wrinkled over it. Immediately above this is a slit along the back of the tooth, which ends nearly in the middle of it, where the tooth curves inwardly. From this aperture, I apprehend, that it sheds its poison, not from the point, where, with the best glasses, I never could perceive an aperture, so that the tooth is not a tube, but hollow only half way; the point being for making the incision, and by its pressure occasioning the venom in the bag at the bottom of the fang to rise in the tooth, and spill itself through the slit into the wound.

“ The animal is supposed to eat but seldom, or only when it is with young.

“ The poison is very copious for so small a creature; it is fully as large as a drop of laudanum, dropt from a vial by a careful hand. Viewed through a glass, it appears not perfectly transparent or pellucid. I should imagine it hath other reservoirs than the bag under the tooth; for I compelled it to scratch eighteen pigeons upon the thigh as quick as possible, and they all died nearly in the same interval of time; but I confess the danger attending the dissection of the head of this creature, made me so cautious, that any observation I should make upon these parts would be less to be depended on.

“ People have doubted whether or not this yellow liquor is the poison; and the reason has been, that animals who tasted it did not die, as when bitten; but this reason does not hold in modern physics. The Viper, deprived of his canine teeth, an operation very easily performed, bites without any fatal consequence with the others.

“ Of the incantation of serpents, there is no doubt of its reality. The Scriptures are full of it. All that have been in Egypt have seen as many different instances as they chose. Some have doubted that it was a trick, and that the animals so handled had been trained, and then disarmed of their power of hurting; and fond of the discovery, they have rested themselves upon it, without experiment, in the face of all antiquity. But I will not hesitate to aver, that I have seen at Cairo, (and this may be seen daily without trouble or expence,) a man who came from above the catacombs, where the pits of the mummy birds are kept, who has taken a Cerastes with his naked hand from a number of others lying at the bottom of the tub, has put it upon his bare head, covered it with
the

the common red cap he wears, then taken it out, put it in his breast, and tied it about his neck like a necklace ; after which it has been applied to a hen, and bit it, which has died in a few minutes, and, to complete the experiment, the man has taken it by the neck, and beginning at its tail, has ate it as one would do a carrot or a stock of celery, without any seeming repugnance.

“ I can myself vouch, that all the black people in the kingdom of Sennaar, whether Funge or Nuba, are perfectly armed against the bite of either scorpion or viper. They take the *Cerastes* in their hand at all times, put them in their bosoms, and throw them to one another, as children do apples or balls, without having irritated them by this usage so much as to bite. The Arabs have not this secret naturally ; but from their infancy they acquire an exemption from the mortal consequences attending the bite of these animals, by chewing a certain root, and washing themselves, (it is not anointing,) with an infusion of certain plants in water.

“ I constantly observed, that however lively the Viper was before, upon being seized by any of these barbarians, he seemed as if taken with sickness and feebleness, frequently shut his eyes, and never turned his mouth towards the arm of the person that held him. I asked Kittou how they came to be exempted from this mischief? He said, “ they were born so ; ” and so said the grave and respectable men among them. Many of the lighter and lower sort talked of enchantments by words, and writing ; but they all knew how to prepare any person by medicines, which were decoctions of herbs and roots.

“ I have seen many thus armed for a season do pretty much the same feats as those that possessed the exemption naturally ; the drugs were given me, and I several times armed myself, as I thought, resolved to try the experiment, but my heart always failed me when I came to the trial.” So far Mr. BRUCE.

The *Cerastes* is well known under the name of “ Horned Viper,” it is effectively distinguished, by two small horns ; one over each eye. It was adopted as a hieroglyphic among the Egyptians, and appears not only on obelisks, columns of temples, statues, walls of palaces, but on mummies also. Notwithstanding which, the complete history of this creature is wanting.

The horns of the *Cerastes* are placed immediately over the eyes ; each of them is planted, as it were, among the small scales which form the superior part of the orbit : its root is surrounded by scales, smaller than those of the back ; and it is of a pyramidical form, each face having a groove running up it. In general appearance, it resembles a grain of barley. The general colour of the back is yellowish, heightened by irregular blotches of deeper colour, which represent small bands, crossing it. The under part of the body is lighter. This serpent is about two feet long, says Count DE LA CEPEDE. This serpent supports hunger and thirst longer than most others ; but is so ravenous, that he throws himself with avidity on the small birds, and other animals on which he feeds ; and as, according to BELON, his skin is capable of the greatest distension, even to double its natural size, it is not surprizing that he swallows so great a quan-

a quantity of food as to render digestion extremely difficult; so that he falls into a kind of lethargic slumber, during which he is easily killed.

Most authors of antiquity, and of the middle ages, thought that this was one of those serpents which could, with the greatest ease, turn themselves all manner of ways; and they report, that, instead of advancing in a straight line, he always took more or less of a circuitous course to attain his object. But, whatever be the address or the swiftness of his motions, he escapes with difficulty from those eagles, (or rather, perhaps, vultures,) which stoop at him with exceeding rapidity; and which, for their services in ridding the country of these venomous reptiles, were regarded as sacred by the Egyptians. Nevertheless, these serpents have always been considered as extremely cunning, both in escaping their enemies, and in seizing their prey: they have even been named *insidious*; and it is reported of them that they hide themselves in holes adjacent to the highways, and in the ruts of wheels, in order more suddenly to spring upon passengers.

BELON says, that the young of the *Cerastes* burst their eggs in the womb of the parent; but GESNER reports, that a noble Venetian kept a female *Cerastes*, (three feet in length,) during some time, which laid four or five eggs, the size of pigeon's eggs: perhaps, both ways may take place.

It is thought the *Cerastes* was consecrated by the ancient Egyptians; for Herodotus describes serpents which answer to the character of this reptile, as being kept in a temple.

So far is abstracted from the successor to BUFFON. I would only add on this last article, that as we have seen the *Naja* worshipped in India, so the *Cerastes* might be worshipped in Egypt, as being one of the symbols of that deity who more immediately presides over death. Vide FRAGMENT, No. 495, *et seq.*

It is proper now to endeavour to apply this information to a specific object. In the EXPOSITORY INDEX, will be seen a suggestion that the *shephiphon*, to which the tribe of Dan is compared, Gen. xlix. might be the *Cerastes*: it is so rendered by the Vulgate. I shall, however, abstract the remarks of MICHAELIS [Quest. lxii.] because they manifest the importance of that information on Scripture Natural History, which it is our present endeavour to promote.

The Arabs name this serpent *Siff*, [*Siphon*, or *Suphon*,] and that seems not very distant from the Hebrew root of the word *sififoon*, [or *shephiphon*.] This serpent [or some other, but this most probably,] is called by the orientals, "the *liar in ambush*;" for so both the lxx. and Samaritan, who are not in the habit of copying each other, render the text in Genesis: and this appellation well agrees with the manners of the *Cerastes*. Pliny says, that "the *Cerastes* hides its whole body in the sand, leaving only its horns exposed; which attract birds, who suppose them to be grains of barley, till they are undeceived, too late, by the darting of the serpent upon them." The Chaldee of *Jonathan* translates "heads of serpents," which seems to allude to such a story; and which may be an appellation of the *Cerastes*. Ephraim, the Syrian, says, there is a kind of serpents whose heads only are seen above the ground. Prosper Alpinus thinks, that only the male has horns:—Bochart thinks that the *Hemorrhoids* also has horns,

horns.—On this article, we refer to Mr. BRUCE, who mentions a Cerastes without horns;—which may be conjectured to be the Hemorrhoids.

As to the effects of the venom of the Cerastes, the ancients say (*Nicander*, for instance,) that its bite causes but little pain; the wound hardens; blisters, filled with a dark matter, rise around it; the upper part of the feet, then the knees, experience a disagreeable weariness:—some add, that violent vertigoes succeed, and a tension in the private parts. Some say, that death follows on the *third* day; but *Nicander* says on the *ninth*.

MICHAELIS finds a difficulty in the mode of attack of the Hebrew *shephiphon* on “the heels of a horse, so as to make the rider fall backward.” He supposes that the phrase restrictively means, that the horse throws the rider off behind him: and, says he, “I should be curious to know how that is accomplished. Commentators commonly say,—because the horse rears up when wounded in the heel. Perhaps they are bad horsemen. In some circumstances a horse would kick, rather than rear up on his hind legs; and the rider would be thrown over his neck, rather than over the crupper.” I feel the force of this observation, and cannot but agree to it. I would therefore doubt, whether the word rendered *backward* should be *restrictively* so taken; for instance, suppose the Cerastes has bit the horse in his left hind leg, the horse kicking out that leg, and his rider perceiving the cause, would, to avoid the serpent, throw himself off on the *further* side of the horse from where the serpent was. I say, he would throw himself off by the *opposite* side of the horse; which, probably, sufficiently meets the meaning of the Hebrew word; and it makes no difference on this notion, whether the front leg or the hind leg be bit; whether the right leg, or the left leg; the rider would certainly avoid *that* side of the horse where the serpent was, and would throw himself off on that side where he was not. Observe, that the margin, instead of *ipel* reads *nepel*; which, that it may signify a person’s causing himself to fall. *Vide* FRAGMENT, No. ccviii. p. 90.

In the EXPOSITORY INDEX I have said, that Dan probably resembled the Cerastes, in feeding full, and then sinking into torpidity, in consequence of such repletion. I think the inducements held out by the spies of the Danites Judges xvii. 9, 10. are precisely adapted to such a people; and we are told at the close of the chapter that they set up the graven image, had their priests, and here they remained, “till the day of the captivity of the land,”—*i. e.* distant from interference with the affairs of Israel, and determinately settled—apart from their brethren. See verses 7. 28.

It remains that we pay some attention to the opinion of Mr. BRUCE, that the Cerastes is, under other names, the serpent meant by *Thebanus Ophites*, *Amodytes*, *Torrída Dipsas*, and *Prester*:—for, if this be true, we must refrain from appropriating these appellations to other serpents mentioned in Scripture. Mr. BRUCE, however, says, that the serpents he found among the balsam-trees, were the Cerastes; but, some from sex, and some from want of age, had not the horns. We must pause here.—Has the female Cerastes no horns?—

This

This is contradicted by the experience of that noble Venetian, who saw a *horned* serpent lay eggs; consequently, this was a female. Does the *Cerastes* acquire horns by age? This may be doubted; and therefore it seems credible, that Mr. BRUCE has here, contrary to his design, given evidence of serpents resembling the *Cerastes*, but of a different kind, as appears by their wanting the horns. I would, therefore, apply to the *Cerastes* the history related above by Mr. BRUCE and others, but would refer to other species those which have not this conformation: such may be the *Ammodytes*, the *Hemorrhois*, the *Dipsas*, &c.

I take this opportunity of adding, that the *Ammodytes* is certainly allied to the *Cerastes*,—by its venom, by its habit of hiding itself in the sand, (whence its name is derived,) the colour of its back being much of a sand colour, varied by large black spots running down it. It resembles the *Cerastes*, too, by having, at the end of its snout, a little eminence, a sort of horn, about a quarter of an inch in height, moveable backwards, whence it has been called in many countries the "*Horned Asp*," or *Aspic*. Its bite kills in three hours' time; though some persons bitten may survive several days.

To this class may also be referred the *horned serpents* of the Gold Coast, mentioned by BOSMAN, who saw the skin of one five feet long—which apparently is the species described by Dr. SHAW, *Naturalist's Miscell.* plate 94. BOSMAN says, these serpents, when filled with prey, though trod on, will hardly awake. As this serpent is found in *western* Africa, may it not be extant in *eastern* Africa, also? The following is Dr. SHAW's description.

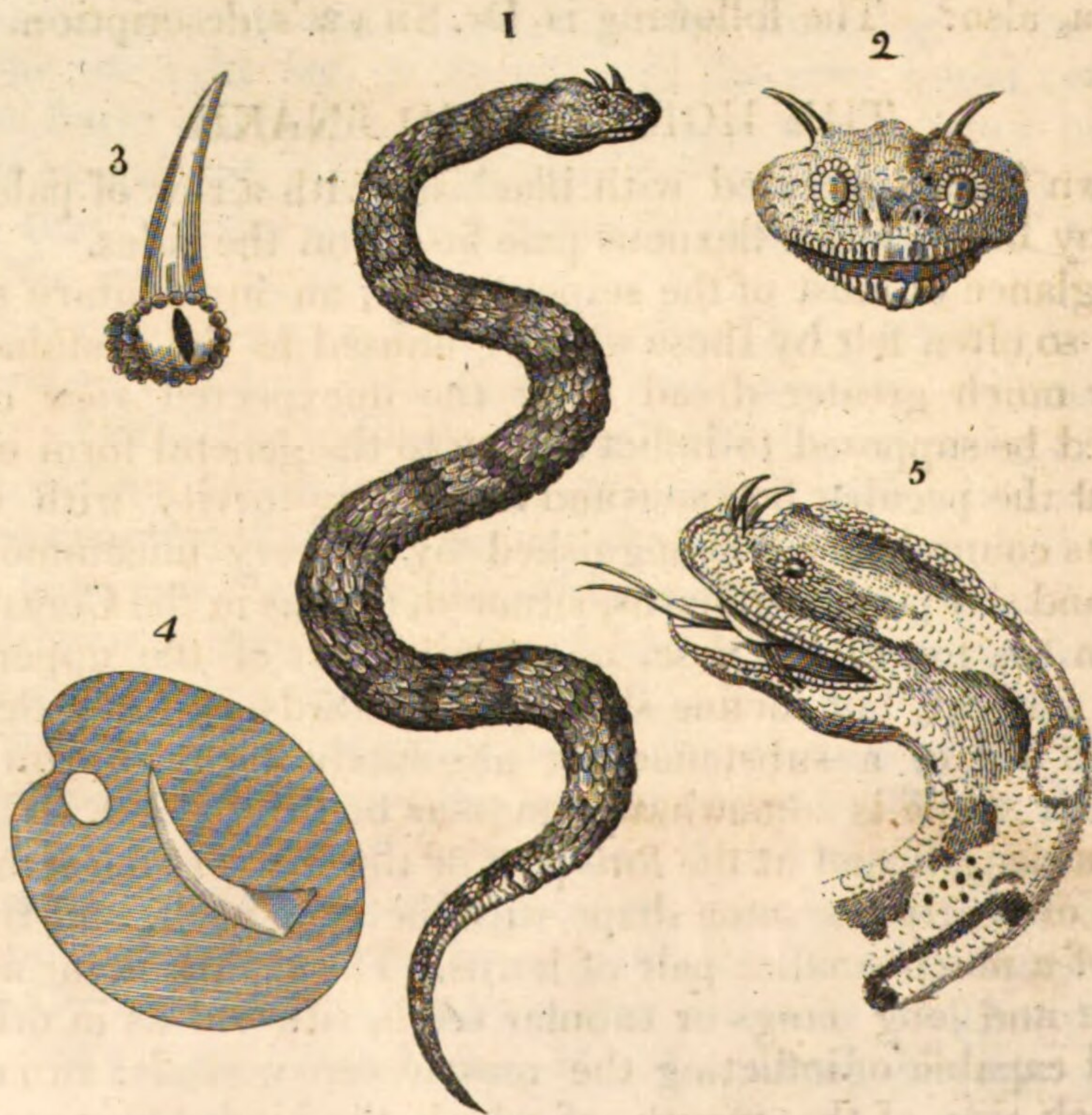
THE HORN-NOSED SNAKE.

Olive-brown Snake, freckled with blackish, with a row of pale dorsal spots surrounded by black, and a flexuous pale fascia on the sides.

If at first glance of most of the serpent tribe, an involuntary sort of horror and alarm is so often felt by those who are unused to the examination of these animals, how much greater dread must the unexpected view of the species here exhibited be supposed to inflict? when to the general form of the creature is superadded the peculiar fierceness and forbidding torvity with which nature has marked its countenance; distinguished by the very uncommon appearance of two large and sharp-pointed horns, situated, (not as in the *Cerastes*, above the eyes,) but on the top of the nose, or anterior part of the upper jaw. They stand nearly upright, but incline slightly backwards, and a little outwards on each side, and are of a substance not absolutely horny, but in some degree flexible. Their shape is somewhat triangular or three-sided. They are about half an inch in length, and at the fore-part of the base of each stands an upright strong scale, of nearly the same shape with the horn itself, and thus giving the appearance of a much smaller pair of horns. The mouth is furnished with extremely large and long fangs or tubular teeth, situated as in other poisonous serpents, and capable of inflicting the most severe wounds; two of these fangs appear on each side of the mouth, of which the hinder pair are smaller than the

the others. The length of this animal is about 35 inches. Its colour is a yellowish olive-brown, very thickly sprinkled all over with minute blackish specks. Along the whole length of the back is placed, at considerable distances, a series of yellowish brown spots or marks, each of which is imbedded in a patch of black; and on each side the body, from head to tail, runs an acutely flexuous or zig-zag line or narrow band, of an ochre-colour. This band is bounded beneath by a much deeper or blacker shade than on the rest of the body. The belly is of a dull ochre colour, or cinereous yellow, freckled with spots and markings of blackish. Besides these there is a number of black spots of different sizes here and there dispersed over the whole snake. The tail is somewhat thin and short in proportion to the body. The scales of this snake are harsh and stiff, and are very strongly carinated. The head is covered with small scales, and is on its upper part marked by a very large longitudinal patch of brown, running out into pointed processes at the sides, and bounded by a space of dull lead-colour or cinereous. The shape of the head is broad and flattened; the cheeks are varied with blackish and yellow. This snake is supposed to be a native of the interior parts of Africa, and was obtained from the master of a Guinea vessel, by the Rev. EDWARD JENKINS of Charles-Town, South Carolina, by whom it was presented to the British Museum.

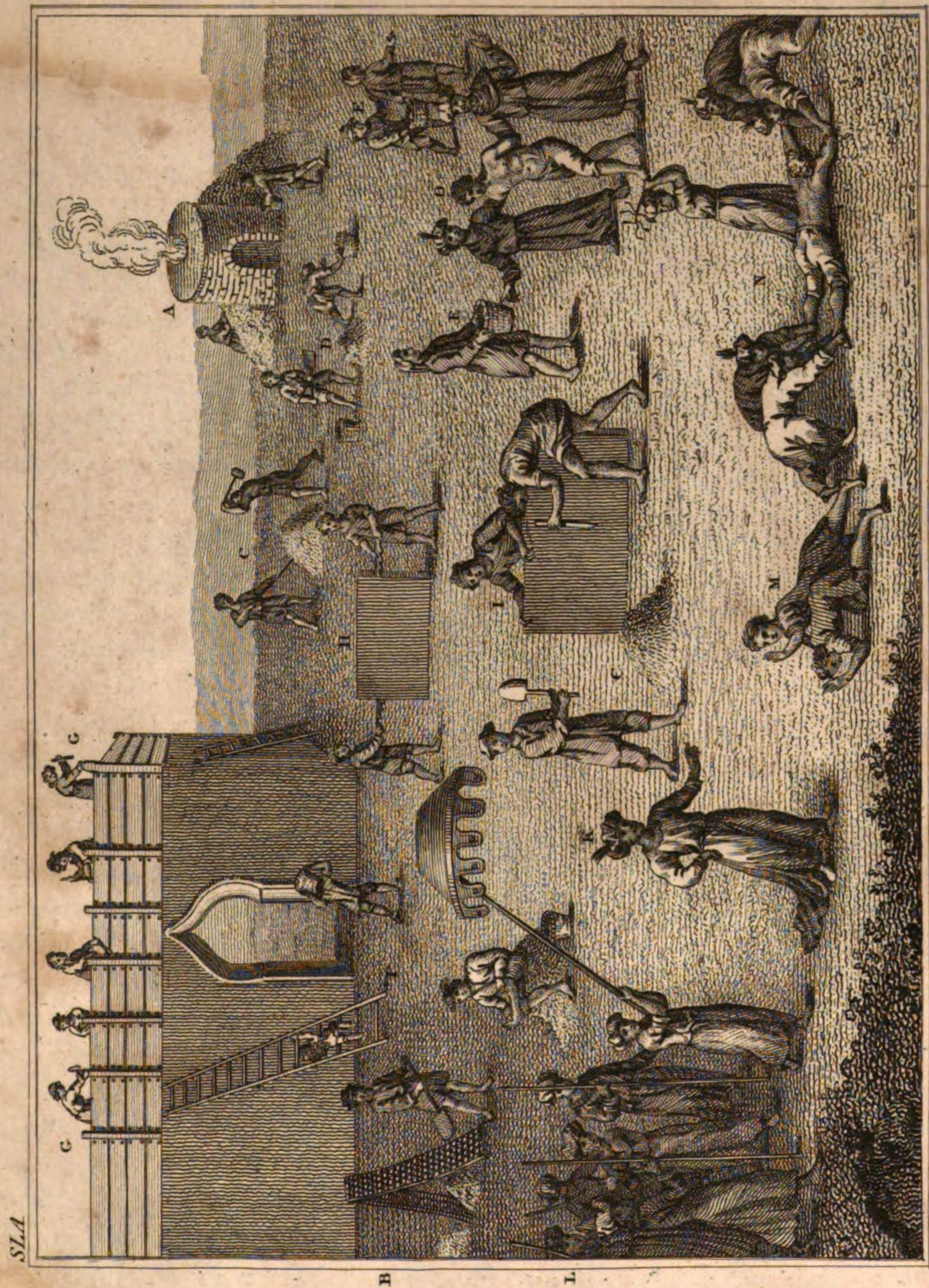
No. 1. The CERASTES. No. 2. Head of the CERASTES, seen in front, shewing his horns. No. 3. Horn of the CERASTES. No. 4. Poisonous fang. No. 5. Head of the Horned Serpent of Western Africa,





This species is a yellowish snake with a series of black spots on the sides, and a patch of black on the head. It is a very venomous snake, and is found in the mountains of Western Africa. The head is bounded by a black line, and the body is marked with a series of black spots of different sizes. The tail is somewhat flattened. The scales of this snake are small and smooth. The head is covered with a very large longitudinal scale, and the sides are marked with a series of black spots. This snake is found in the mountains of Africa, and was obtained from the collection of Mr. J. S. JENKINS of Charles Town, Virginia, and is now in the collection of the British Museum.





SLAVES in the EAST.

EMPLOYMENTS OF SLAVES IN THE EAST.

EXODUS, CHAPTER V. &c.

THE Plate before us is copied from a design annexed to "A Voyage to Barbary, for the Redemption of Captives." It was drawn by Capt. HENRY BOYD, while in a state of slavery: and therefore may be considered as authentic; if it boast no great elegance as a design, I conclude that the Captain found it too correct a representation of facts.

It shews the employments, the treatment, and the condition, of those who have had the misfortune to fall into the state of slavery among the Moors, and is fairly applicable to the whole of Africa. It corresponds evidently, to the circumstances attending the state to which the Israelites were reduced in Egypt; and as such it is offered to the reader.

The employment of Slaves, as appears by our Plate, is, Building, in its various branches: from the earliest preparation of the mortar, as, attending the furnace; which, I suppose, is for the burning of lime, in this delineation; sifting the materials, mixing them, &c. The mortar is not of that kind which among ourselves is laid between bricks in their courses, being more of a liquid, and flowing nature, to be poured into frames, or caissons, &c.; there to set, and harden, and form the wall itself. After the ingredients of the mortar are sifted, they are well beaten together, and intimately commixed, by constant exertion, and labour, continued incessantly, during many hours, and sometimes days, till thoroughly incorporated.

This mixture is then carried in baskets, to those workmen, who pour it into the cases for its consolidation; these beat it firmly into its place, and when it is hardened, they remove the boards from around it, and apply them elsewhere, as wanted in the continuation of the wall. Others of the workmen are employed in hewing stones, and preparing them for the stronger parts of the building: such as the corners, entrances, openings, &c. where they add to the strength of the edifice, and bind the whole together.

By attending in a regular order, to the particulars that are comprised in our Plate, we shall be enabled to understand them with greater distinctness and effect.

A. THE FURNACE. This is the only delineation of an Eastern furnace which I have yet met with. I suppose its construction is for the purpose of burning lime; because it seems to be unfit for the burning of brick, or tile, &c.

We have in the Hebrew three words rendered by our translators "Furnace."

I. CABASHEN (כבשן), which is used Exod. ix. 8, 10. where we read, that Moses took handfuls of ashes of the furnace, and sprinkled them up toward heaven.

EXODUS v.

2. CUR

2. CUR (כור), which should seem to be an assay furnace. 3. TANUR (תנור), which I believe resembles the broad shape of a frying pan: or rather, that kind of broad, flat oven, used by our muffin bakers. I conclude, that this furnace in our print, is the *Cabashen*; as it seems very likely that the ashes which Moses threw up towards heaven, should be taken from some instrument of oppression at which the Israelites had laboured, and by means of which they had been ill treated.

B. The SIEVE. There are two words rendered "sieve" in our translation.

1. CABURAH (כברה), which I take to be the corn van; Amos ix. 9. "I will sift the house of Israel among all nations like as (*corn*) is sifted in a sieve, yet shall not the least GRAIN fall upon the earth;" the mention of *grain* clearly implies *corn*. It is evident, that the matters sifted in this "sieve" did not pass through it; but the *chaff* was blown away by the wind, while the corn, by its weight, fell into its place, and was preserved.

2. NEPHAH (נפה); this word occurs [NEPHAT נפת], Isaiah xxx. 28. where our translation reads, "to sift the nations with the sieve of vanity." Observe, the word to *sift* is different in these passages [in Amos it is ינוע, in Isaiah it is הנפה] which clearly denotes a different manner of sifting; and as we have formerly considered the manner of sifting corn, we may conclude, by analogy with our own customs, that the manner of sifting lime, gravel, stones, &c. was by no means the same. Bishop LOWTH's note on this passage, may set in a striking light the disadvantage of considering only one manner of sifting.

"To toss the nations with the van of perdition. The word להנפה is in its form very irregular. Kimchi says it is for להניף. Houbigant supposes it to be a mistake, and shews the cause of it; the joining it to the ה, which should begin the following word. The true reading is להניף הגוים."

The Vulgate seems to be the only one of the ancient interpreters, who has explained rightly the sense; but he has dropped the image: "ad perdendas gentes in nihilum." Kimchi's explanation is to the following effect: "נפה is a van with which they winnow corn; and its use is to cleanse the corn from the chaff and straw: but the van, with which God will winnow the nations, will be the van of emptiness, or perdition; for nothing useful shall remain behind, but all shall come to nothing and perish." So far Bp. LOWTH.

Now, it may be thought, that a rougher manner of sifting would best meet the prophet's idea in this passage; and therefore, that what would suit gravel or stones, &c. will very expressively coincide with this violent sifting of the nations; since they are not to be preserved, for which purpose corn is sifted; but to be destroyed, as what *passes through a skreen* is intended to be differently applied from what remains behind. N.B. Though our gravel-*skreen* be nearly the article designed, yet the use of the word *skreen* would be improper in this passage, being liable to an ambiguity; (as would be "riddle," or, &c.) since to *skreen* also implies to shelter, to defend, &c. in our language.

C, is the manner of beating mortar with a wooden shovel, very different from the

the corn shovel, the name of which in Hebrew, appears to be RECHAT (רחה): but we read also, Exod. xxvii. 3. xxxviii. 3. of shovels for the ashes of the altar, (יעים) which no doubt were calculated for dispatch in removing those ashes; and to this idea agrees the passage Isaiah xxvii. 7. the hail shall (יעה) turn off—shovel away—sweep away—remove quickly—the refuge of lies: *i. e.* shall dispatch it with haste. Vulgate *subvertet*, shall overturn: Theodotion *ταραξεῖ*, shall *disturb*.

D. More shovelling away of mortar. As the shovel of the figure C seems rather adapted to beating than to shovelling, we only remark the similarity between the shovels of B and D, which leads us, on the whole, to suppose that these are of the kind mentioned in Exodus.

E. The mortar basket, which I presume in Hebrew is called DUD (דוד); and this seems to be precisely what is intended Psalm lxxxi. 6. when Israel was in Egypt, where he heard a language he understood not. *I removed his shoulder from the burden*, like those of figures F, *and his hands were delivered from the DUD*; the mortar basket, like that of figure E, who carries his basket with both hands: which corrects our translation; where *pots*, is in the *plural*, whereas, in the original the word *dud* is singular, (מדר) though “hands” is plural.

F. Mortar carried on the shoulder, from the mixed mass, to those who are to employ it in raising the wall: the passage of Scripture to which this might be applied, has been recently mentioned: “*I removed his shoulder from the burden*,” &c.

G. Workmen employed to construct the cases of boards into which the mortar is to be *filled*; also to deposit the mortar, beat it, &c.

H. I. Stone-hewers, and stone-squarers: Their actions pretty much the same as those of labourers on the same materials among ourselves.

K. An officer appointed to oversee the workmen: he is of some dignity, as appears by his umbrella, his guards, &c. perhaps a governor; hardly a king.

L. Guards of the overseer, or governor.

M. Slaves who have been accused, awaiting their sentence from the governor. Observe, the prostration common in the East: that it extends to a very profound attitude, &c.

N. The manner of scourging: which is, by laying the sufferer on his face, extended his whole length on the ground, his limbs being held, while a person with a whip of several cords strikes him on the bare back. This whip having several lashes, I conceive, is analogous to what the Jews say on the subject of whipping, that it was performed by a whip of three thongs; thirteen strokes of which made thirty-nine lashes, so that they thereby made a provision against the number of stripes exceeding forty, according to Deut. xxv. 3. 2 Cor. xi. 24.

I would query also, whether this kind of whip may not be the “scorpion” of 1 Kings xii. 11—14. 2 Chron. x. 11—14. If so, then, seeing this instrument is employed in the castigation of slaves, there may be a stronger taunt in the words of Rehoboam than is usually perceived; “My father chastised you with whips of a single thong; I will chastise you with whips of many thongs: even with scorpions—with such as are used in lashing of slaves.” O.

O. A culprit advancing to receive his sentence, and his punishment. As this man is naked, as N is naked also, he is probably, condemned to punishment; whereas, M not being naked, *may* have received a favourable sentence, and being perhaps acquitted, are returning thanks, &c. for the favour done them. Their attitude is but in unison with the expression of such a deliverance and acknowledgement, in the east.

It is to be observed, that the *Heads* of all trades and professions, are of some dignity among the orientals. Even the common executioner has many followers, when he goes his rounds in the discharge of his office, by inflicting punishments.

On the whole, then, this print furnishes an accurate representation of the condition of Israel in Egypt. Here is the furnace, the mortar basket, the building, the overseer, and the punishment: here seems to be the rigour also, and the slavery; with many particulars, to which we find allusions in the history of the posterity of Jacob, as hinted at in other passages of Scripture, beside the immediate detail in Exodus; which if the reader will peruse with this print before him, he will probably perceive in it many points of allusion to the customary labours and situation of slaves, which need not to be particularized here.

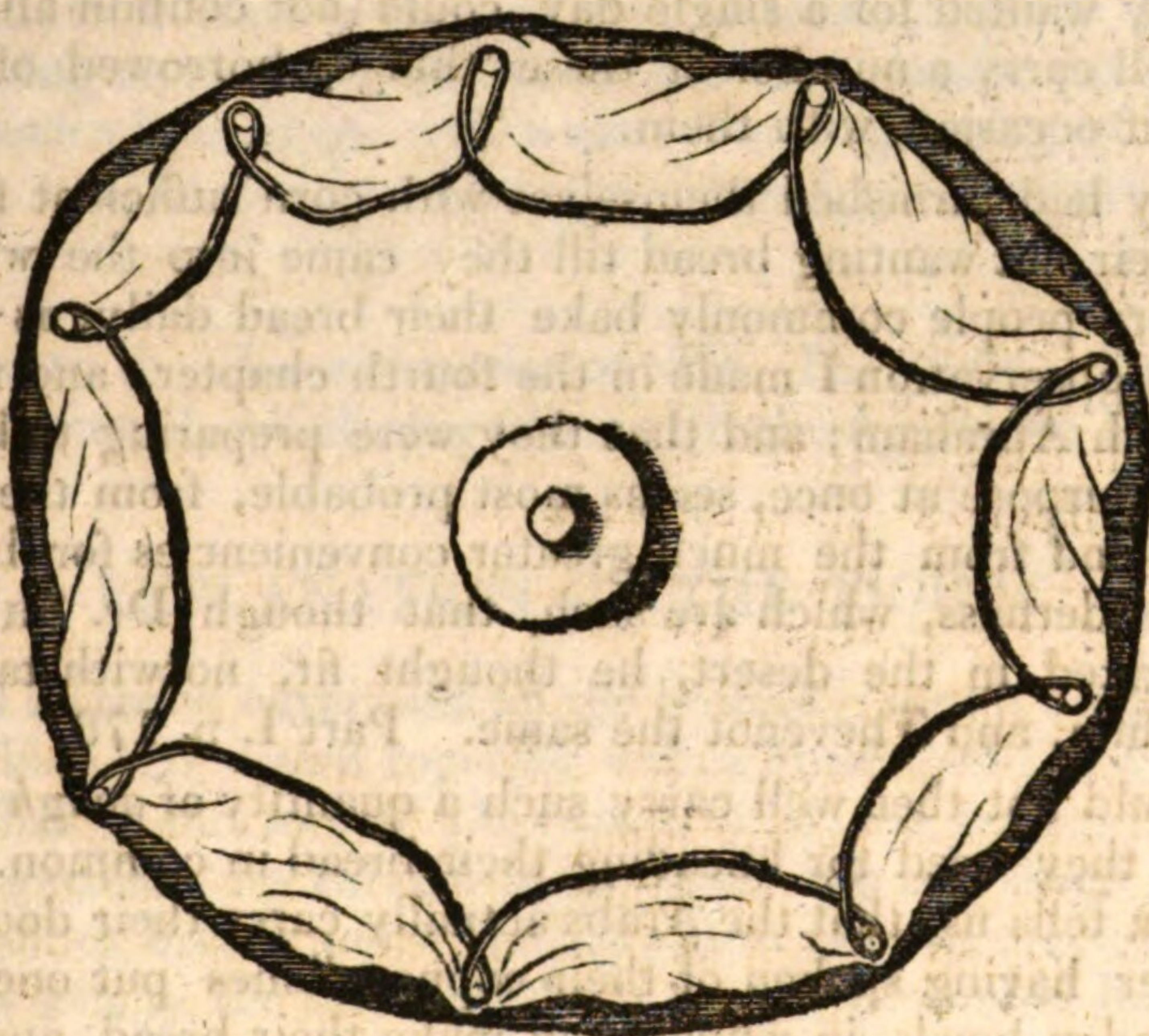
At Algiers, the slaves of the Dey are allowed three small loaves of bread daily; whatever else they may need, they must procure by their own industry. Their labour begins very early in the morning, and is continued, without intermission, during the heat of the day, however excessive it may be, till within an hour or two of sun set, so that they suffer all the severity of that torrid climate. On Friday, which is the Mahometan sabbath, they are free to repose. In the camp, these slaves carry the baggage, and perform other laborious offices: but in time of peace, they are employed on public works; such as, demolishing walls, hewing rocks, drawing carriages laden with materials for building, stones, &c. Some are also loaded with heavy chains.

We have considered it as certain, in the course of our Geographical enquiries, that the Pharoah to whom Israel was in bondage, was a foreign prince, from a distant country eastward; in short, almost or altogether a Hindoo, not a native Egyptian: as this prince, found the sons of Jacob already in Egypt, settled and respected there, it is probable he would not add to their servitude by the disgrace of the chain; but, in most other respects there can be no doubt, but what their condition was perfectly conformable to that of slaves destined to labour in the erection of public buildings—*i.e.* the Pyramids in Egypt, still extant to prove the exertions of those who erected them.

KNEADING TROUGHS.

EXODUS, CHAP. XII. verse 34.

AND THE PEOPLE TOOK THEIR DOUGH, BEFORE IT WAS LEAVENED,
THEIR KNEADING TROUGHS BEING BOUND UP IN THEIR
CLOTHES UPON THEIR SHOULDERS.



THE following are the observations of Mr. HARMER, in his *Illustrations of Scripture*, vol. ii. p. 447; they are so much to the purpose that we shall add little, or nothing, to them.

“The dough, we are told, which the Israelites had prepared for baking, and on which it should seem they subsisted after they left Egypt, for a month, was carried away by them in their *kneading-troughs*, on their shoulders, *Exod. xii. 34*. Now an honest thoughtful countryman, who knows how cumbersome our kneading-troughs are, and how much less important they are than many other utensils, may be ready to wonder at this, and find a difficulty in accounting for it. But this wonder perhaps may cease, when he comes to understand, that the vessels which the Arabs of that country make use of, for

EXODUS, CHAP. XII. 34.

for kneading the unleavened cakes they prepare for those that travel in this very desert, are only small wooden bowls; and that they seem to use no other in their own tents for that purpose, or any other, these bowls being used by them for kneading their bread, and afterwards serving up their provisions when cooked: for then it will appear, that nothing could be more convenient than kneading-troughs of this sort, for the Israelites, in their journey. See Dr. SHAW's Preface, p. 11, 12. Also, *Travels*, p. 231.

"I am, however, a little doubtful, whether these were the things that Moses meant by that word which our version renders *kneading-troughs*; since it seems to me, that the Israelites had made a provision of corn sufficient for their consumption for about a month, and that they were preparing to bake all this at once; now their own little wooden bowls, in which they were wont to knead the bread they wanted for a single day, could not contain all this dough, nor could they well carry a number of these things, borrowed of the Egyptians for the present occasion, with them.

"That they had furnished themselves with corn sufficient for a month, appears from their not wanting bread till they came into the wilderness of Sin; that the eastern people commonly bake their bread daily, as they want it, appears from an observation I made in the fourth chapter, and from the history of the Patriarch Abraham; and that they were preparing to bake bread sufficient for this purpose at once, seems most probable, from the universal bustle they were in, and from the much greater conveniencies for baking in Egypt than in the wilderness, which are such, that though Dr. SHAW's attendants sometimes baked in the desert, he thought fit, notwithstanding, to carry his *uit* with him, and Thevenot the same. Part I. p. 178.

"They could not then well carry such a quantity of *dough* in those *wooden bowls*, which they used for kneading their bread in common. What is more, Dr. Pococke tells us, that the Arabs actually carry their dough in something else: for, after having spoken of their copper dishes put one within another, and their wooden bowls, in which they make their bread, and which make up all the kitchen-furniture of an Arab, even where he is settled; he gives us a description of a round leather coverlid, which they lay on the ground, which serves them to eat off, which, he says, has rings round it, by which it is drawn together with a chain, that has a hook to it, to hang it by. This is drawn together, he says, and sometimes they carry in it their *meal made into dough*; and in this manner they bring it full of bread, and, when the repast is over, carry it away at once, with all that is left. Vol. I. p. 182.

"Whether this utensil is rather to be understood by the word translated *kneading-troughs*, than the Arab *wooden bowl*, I leave to my reader to determine. I would only remark, that there is nothing, in the other three places in which the word occurs, to contradict this explanation. These places are
Exod.

Exod. viii. 3 : Deut. xxviii. 5, 17, in the two last of which places it is translated *store*.

“ It is more than a little astonishing to find Grotius, in his comment on Exod. xii. 39, explaining that verse as signifying that they baked no bread in their departing from Egypt, but stayed till they came to Succoth, because they had not time to stay till it was leavened in Egypt; when it is certain they were so hurried out of Egypt, as to be desired not to stay to bake even *unleavened* bread ; nor can we imagine they would stay till leaven put into it at Succoth had produced its effects in their dough, since travellers now, in that desert, often eat unleavened bread ; and the precepts of Moses, relating to the commemoration of their going out of Egypt, suppose they ate unleavened bread for some time.

“ Succoth, the first station then of the Israelites, which Dr. SHAW supposes, was nothing more than some considerable encampment of Arabs, must have been a place where there was a *considerable quantity of broom, or other fuel*, which is not to be found in that desert every where.” SHAW, p. 138.

We shall add to the above remarks of Mr. HARMER, the following description of this utensil, which, together with the figure, we have copied from Dr. POCOCKE.

EXPLANATION OF THE FIGURE.

“ The round leathern cover laid on the ground is shewn above. It has rings round it, by which it is drawn together with a chain that has a hook to it, to hang it by, either to *the side of the camel*, or in the house; this draws it together, and sometimes *they carry in it the meal made into dough*; in this manner they bring it full of bread; and when the repast is over, carry it away at once, with all that is left, in the same manner. It is represented here as the larger sort are made, only with a leathern thong round the rings.”

We shall conclude with the description which NIEBUHR gives of his travelling equipage, in which we find a piece of furniture of the same nature as that in the figure ; and capable, not only of the same purpose, but of others also. We observe, too, that this is usually *slung on the camels*, in travelling; which accounts for the remark of the Israelitish writer, that the people “ carried their *kneading-bags* on their shoulders,” bound up, I suppose, *knapsack-fashion*. This may be ascribed to two coincident causes, 1. They had not camels sufficient to transport the baggage of such a numerous host; 2. They were sent away with all speed, and had no time allowed them to procure travelling animals for their accommodation; they must either carry their food themselves, or relinquish it.

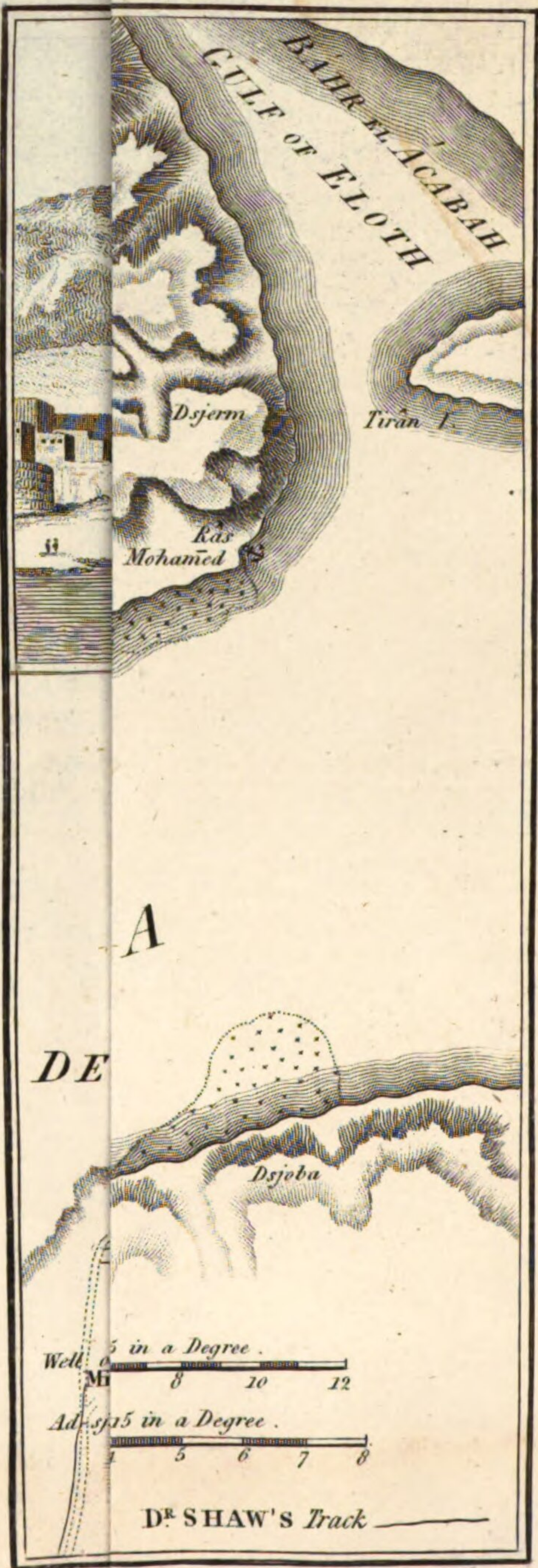
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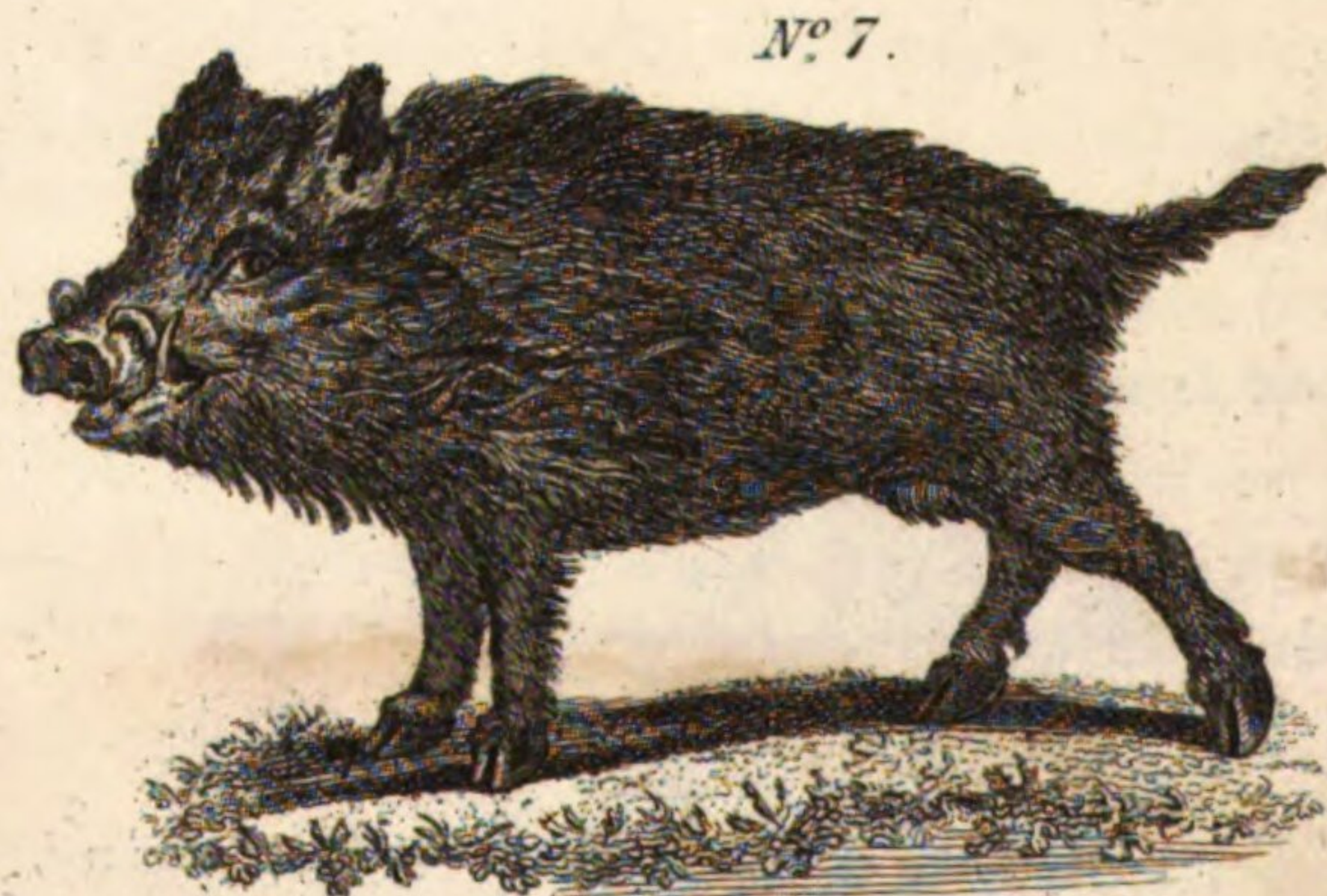
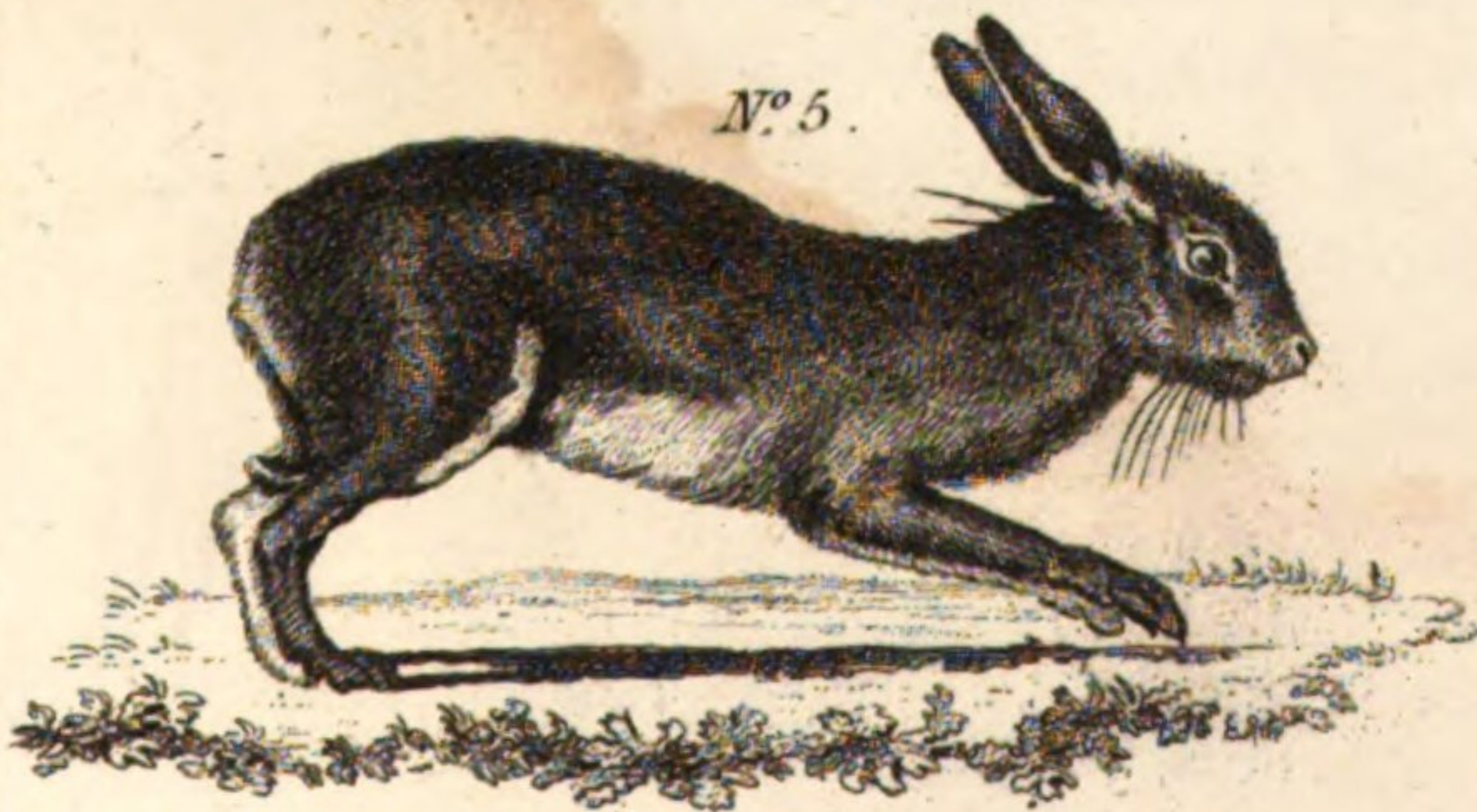
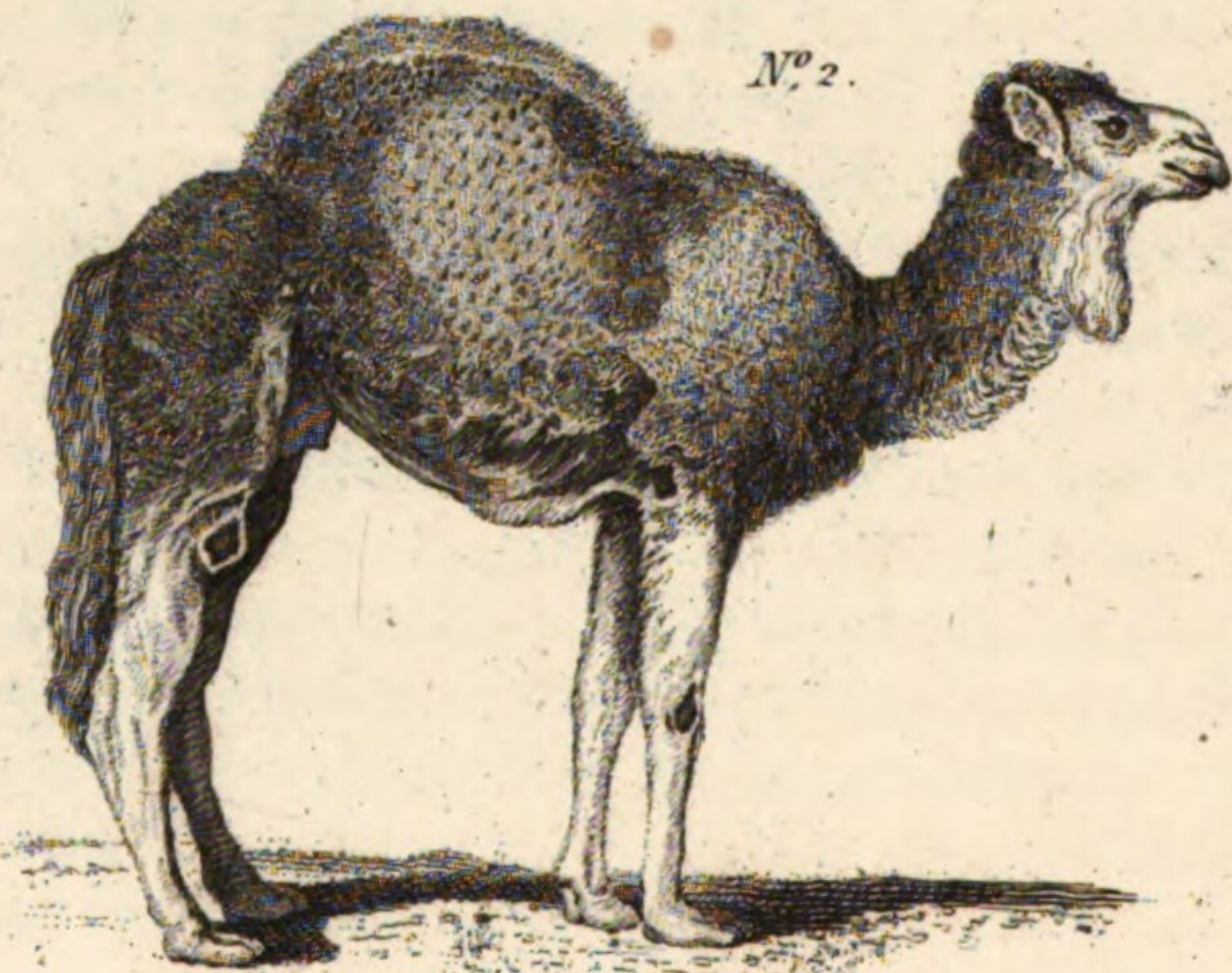
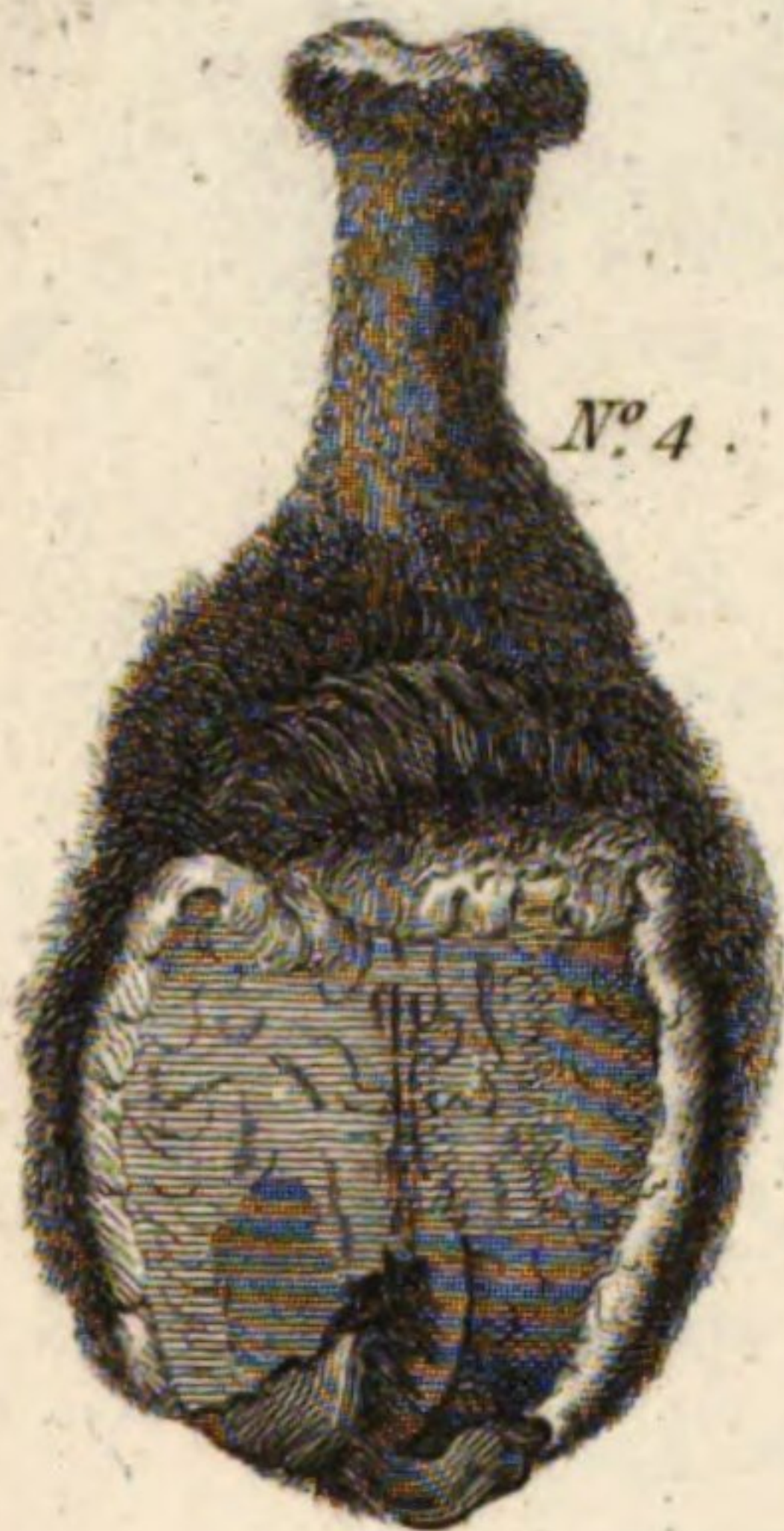
The following is from the English Edition of NIEBUHR. Vol. I. p. 168.

“ In the desarts through which we were to travel, a tent and beds were indispensibly necessary. We had a neat collection of kitchen utensils made of copper, and tinned without and within. Instead of glasses, which are so liable to be broken, we used also copper bowls completely tinned. A bottle of thick leather served us as a caraffe. Our butter we put up in a leathern jar. In a wooden box, covered with leather, and parted out into shelves, we stored our spiceries of all sorts; and in another similar box, we laid our candles; in the lid of the latter, we fixed an iron socket which served us for a candlestick. We had large lanthorns of folded linen, with the lid and bottom of tin. *For a table, with table linen, we had a round piece of leather, with iron rings at certain distances round it, through which cords were passed, after our meals; and the table hung, in the form of a purse, upon one of our camels.* But we imprudently put our wine into great flasks, called in the East *damasjanes*, and large enough, each of them to contain twenty ordinary bottles. These vases are very liable to be broken by the jolting of the camels, as we found by the loss of a part of our wine. It is much better to put your wine, when you are to carry it upon camels, into goat's skin bottles. This species of vessels may, at first, appear little suitable for the purpose; but they communicate no bad taste to the liquor, if the skins have been properly dressed. The same vessels answer best to carry the store of water that is requisite in travelling through dry and desart countries.”

The reader has now we presume, a much clearer idea of the article designed by the Hebrew historian, than was possible for him to have obtained from the rendering adopted in the English version—*kneading-trough*. The notion of a *kneading-TROUGH* and that of an open leather cover, capable of forming a *bag*, are so distinct, that it seems every way necessary, were it only to avoid that ridicule to which scepticism is ever prompt, that a different word should be substituted; a word more capable of designating the subject, and describing the utensil intended.

In fact, if proper terms were sought out to particularise, if not to describe, the utensils of the East, domestic or others, with which we are now much better acquainted than our most worthy and venerable translators were, many of the sneers that pass for wit, while they are nothing but ignorance, would be deprived, even of that shadow of support for their prophaneness at which they now catch, for want of more applicable information.





EXPLANATION OF THE BOOK OF EXODUS

CHAPTER XL. VER. 4. &c.

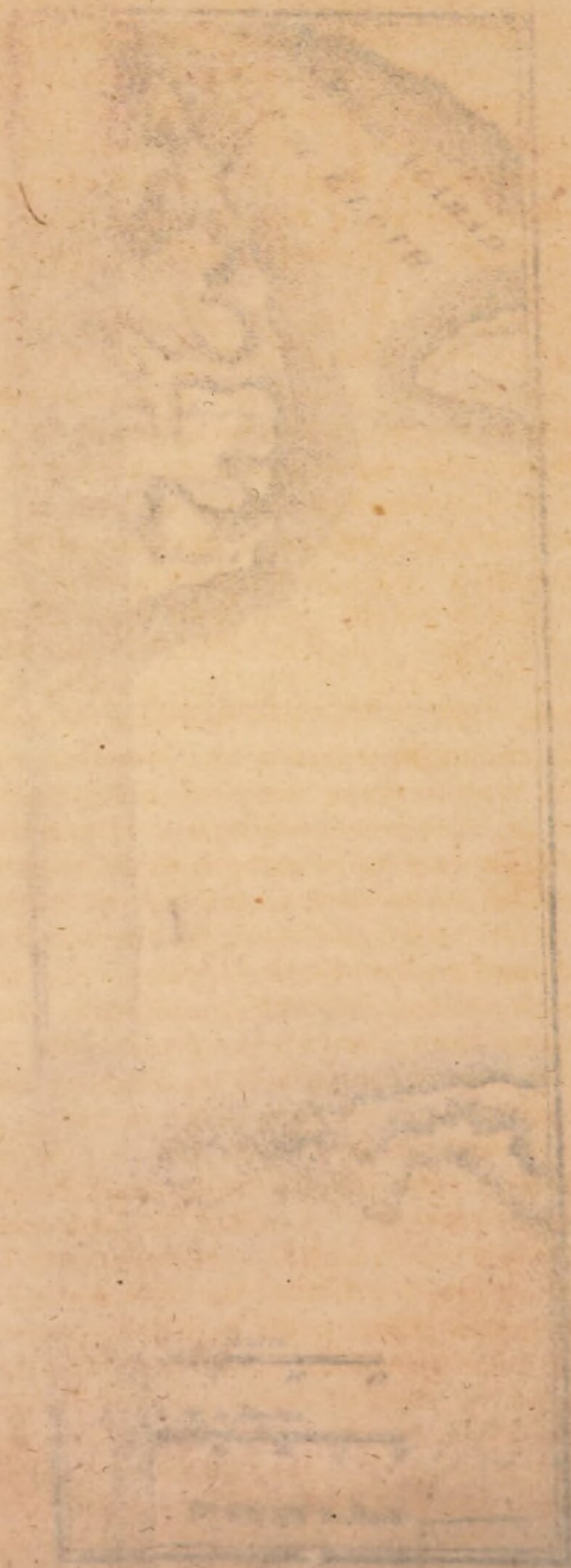
EVERY naturalist will observe that the construction of the feet of animals is adapted to the nature of their food, and to the manner of their locomotion. Thus the feet of a bird are adapted for flight, and the feet of a quadruped for running. The feet of a fish are adapted for swimming, and the feet of a reptile for crawling. The feet of a man are adapted for walking, and the feet of a horse for running. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field. The feet of a man are adapted for walking, and the feet of a horse for running. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field.

So the feet of animals are adapted to their nature, and the feet of a man are adapted for walking. The feet of a horse are adapted for running, and the feet of a lion are adapted for pouncing. The feet of a bear are adapted for climbing, and the feet of a deer are adapted for leaping. The feet of a goat are adapted for standing on steep rocks, and the feet of a camel are adapted for walking in the desert. The feet of a horse are adapted for running in the field, and the feet of a lion are adapted for pouncing. The feet of a bear are adapted for climbing, and the feet of a deer are adapted for leaping. The feet of a goat are adapted for standing on steep rocks, and the feet of a camel are adapted for walking in the desert. The feet of a horse are adapted for running in the field, and the feet of a lion are adapted for pouncing. The feet of a bear are adapted for climbing, and the feet of a deer are adapted for leaping. The feet of a goat are adapted for standing on steep rocks, and the feet of a camel are adapted for walking in the desert.

It appears to be the principle of the construction of the feet of animals, that the feet of a man are adapted for walking, and the feet of a horse for running. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field.

We may, I think, consider the animal kingdom as divided into two parts, the one part being the feet of a man, and the other part being the feet of a horse. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field.

It is proper to recollect, that the feet of a man are adapted for walking, and the feet of a horse for running. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field. The feet of a lion are adapted for pouncing, and the feet of a bear for climbing. The feet of a deer are adapted for leaping, and the feet of a goat for standing on steep rocks. The feet of a camel are adapted for walking in the desert, and the feet of a horse for running in the field.



THOUGHTS ON MOUNT SINAI, AND TRANSACTIONS THERE.

EXODUS, CHAPTER XXIV.

WHATEVER places or things mentioned in Holy Writ may have been changed in their properties, or appearances, rocks and mountains must continue the same. Rivers and floods may have forsaken their beds; but, hills whose bases are granite, or whose sides are flint, remain to this day in the same situation and state as the most antient days beheld them.

This is no less true of Mount Sinai than of any other mountain; itself a granite rock, and surrounded on all sides by granite rocks, it offers much the same aspect to beholders *now*, as it did when Moses fed his flock around it, or when he was here the "King in Jeshurun."

By enquiring what is the present character, the geography, and appearance of this mountain, we may better understand some of those histories of which it was antiently the scene, and of which we read in Scripture.

BAUMGARTEN travelled to Mount Sinai A. D. 1505. After describing, with resentment, the impositions he suffered from the Arabs, he tells us,

"About the second hour of the night we went up to mount *Horeb*. There were in company with us two *Greek* monks, whom they call *Calageri*, and three *Arabians* who lived in the monastery of St. *Catharine*; whom our interpreter had deputed to be our guides, himself being so fat that he could not climb to such a height. We ascended the mountain by the light of the moon, and carried victuals and other necessities along with us; we often rested ourselves by the way to recover our lost breath, and encouraged and roused one another to undergo the labour. The ascent of this hill is both steep and high, and, as the monks that were our guides told us, it has seven thousand steps of square stone, besides the greater part where the ascent is natural. Having come half way up the mountain we found a chapel dedicated to *Mary*, and within it a pure spring that was very useful to strangers.

"From thence we went to *Helias's* chapel, where they say he staid when he fled from *Jezebel*, 1 *Kings*, xix. At last, after much sweating and a great deal of toil and labour, we reach'd the top of mount *Horeb*, where in most humble posture we offer'd up our most hearty thanks to almighty God who had preserv'd us hitherto.

"From thence we went to the church dedicated to our blessed Saviour, which is built in that place, where, as 'tis said, *Moses* spake with the Lord, and received the tables of the law, *Exod.* xxxiv. Hard by that church is a rock, the highest in all the mountain, and twenty paces round, in which place the Lord is said to have talked with *Moses*, while it smok'd and look'd terrible with clouds, thunder and lightning; and indeed to this day both this and some other neighbouring mountains shine with a sort of brightness resembling that of polish'd copper. About fifteen paces from hence is a *Saracen* mosque, built over the place where *Moses* is said to have fasted forty days and forty nights, by a special Divine assistance, before he received the law. *Exod.* xxiv. In the church dedicated to our Saviour we lay down on the bare ground all night, and trembled so for cold, that we slept little or none all that night.

EXODUS, xxiv.

" On

“ On the 18th about sun-rising we came down the west side of mount *Horeb*, by a very steep and dangerous way; and came into a valley betwixt mount *Horeb* and *Sinai*, in which was a monastery dedicated to forty Saints, where refreshing ourselves a little, we left our baggage under the care of a certain monk.” To ascend *Sinai*—

“ We began our journey, with much more toil and danger than in mount *Horeb*. For by this time the sun had reach'd the middle of the heavens, and the tops of the mountains with which we were surrounded intercepted the cool and refreshing breezes; and beside, such was our stupidity, that we had quite forgot to bring bread with us, and our perfidious guides had made us believe that we should find water enough on the mount.

“ The ascent was both slippery and steep, insomuch that we were for the most part forced to make use of all four; which way of creeping was so uneasy, that I cannot express how wearisome and dangerous it was, and how strong one's knees must needs be that could endure it. For while one that's going up treads upon these stones that lie loose, they presently yield; and in a steep ascent, if one does not take care to set his feet warily, if one of the stones be mov'd out of its place, the rest follow, and tumble down upon the followers. And besides while we were below, the roughness of them was very uneasy to us, because they were often tumbling down, and we were forced to handle them often when we were beginning to scramble up; but having got up higher, we were a little refreshed by a cooler breeze, and the sight of the goats that were running along the rocks diverted in some measure the thoughts of the toil. Afterwards refreshing ourselves with a little sugar, and resuming new vigour, we encountered the difficulty again, and sometimes climbing, sometimes creeping, we had almost quite lost our breath, and were mightily distress'd.

“ And besides, the monks and *Arabians* were so tir'd that they could hardly know the mountain; for there were a great many high tops of mountains so like one another, that for a long time it was very hard to tell which was which, if there had not been some heaps of stones lying here and there, which had been gather'd by others to direct succeeding travellers in their way; by which means our guides at last coming to know the top of *Sinai*, got before, and call'd to us with a great deal of joy; which so inspir'd us with courage and vigour, that we follow'd them quickly. But at last the ascent grew so difficult, that all our former toil and labour seem'd but sport to this. However we did not give over, but imploring the Divine assistance, we used our utmost endeavour. At last, thro' untrodden ways, thro' sharp and hanging rocks, thro' clefts and horrible deserts, pulling and drawing one another, sometimes with our belts and sometimes with our hands, by the assistance of Almighty God, we all arriv'd at the top of the mountain. But our *Arabians*, who were not spur'd on by devotion, and who had no inclination to the thing, thinking it impossible to get up, stay'd below the rock, admiring our fervour, eagerness, and strength. The top of mount *Sinai* is scarce thirty paces in compass; there we took a large prospect of the countries round about us, and began to consider how much we had travell'd by sea and land, and how much more we had to travel, what hazards and dangers, and what various changes of fortune might probably befall us; while we were thus divided between fear and hope, and possessed with a longing for our native country, it is hard to imagine how much we were troubled.

“ Mount *Sinai* raises its lofty head so far above those of other mountains, and affords such a vast prospect on all hands, that altho' the Red Sea be three days journey distant from it, it seem'd to us but about a gun-shot. From thence we saw several
desolate

desolate islands in that sea, and beyond it the desert and mountains of *Thebais*, where the hermits, *Paulus*, *Antonius* and *Macarius*, are said to have liv'd. From thence also we descry'd *Al-Thor*, that famous port on the Red-sea, into which all the ships laden with spices from *India* come; and from thence they are carried on camels thro' the desert into *Alexandria*, and distributed almost thro' all the world.

"But because thirst and the importunity of our guides would not allow us to stay longer, we offer'd up our humble devotion to the most high God, and went down; and the descent being easier than the ascent, in a short time, sometimes tumbling, sometimes walking, we came to the middle of the mountain; where finding a little spring, but clear and wholesome, we drank heartily, to make amends for the long thirst we had endured.

"Near the monastery of the forty Saints there is a most delightful garden of olive, fig, pomegranate, almond, and several other sorts of trees. Leaving this place, and taking a compass about *Horeb*, we came to a certain stone at the foot of the mountain, which *Moses*, as 'tis recorded *Numb. xx.* having struck with his rod, brought forth as much water as served all the men and beasts that were in the *Israelites'* army.

"Though *Moses* is said to have struck the rock only twice with his rod, yet there are twelve marks, or prints on it. A miracle the more wonderful, because this stone, though separated from the rest of the rock, and almost a square figure, yet is fixed in the ground by only one pointed corner, and consequently not in so fit a posture to extract any moisture from the earth; and therefore its sending forth such abundance of water must have been the work of an Almighty hand, and to this day there comes a sort of liquor out at one of these marks; which we both saw and tasted.

"Not far from hence is a place where (*Numb. xvi.*) the earth opened its mouth and swallowed up *Dathan* and *Abiram*, with their families, and all that they had.

"A short way from hence is that well of which *Moses* made the people drink the waters of malediction, by which many of them died and were buried there, after their adoring the molten calf. Hard by this place is the burial place of the *Greek* brethren, where about nine thousand of them are said to be buried.

"Having fetch'd a compass almost about mount *Horeb*, near sun-set we entered the monastery of *St. Catherine*; and though we were almost spent with weariness and hunger, yet weariness afflicted us most; for next day we were not able to stand."

The following is from Dr. SHAW's Travels, page 350.

"We were near twelve hours in passing the many windings and difficult ways which lie betwixt the deserts of *Sin* and *Sinai*. The latter is a beautiful plain, more than a league in breadth, and nearly three in length, lying open towards the N. E. where we enter it, but is closed up to the southward by some of the lower eminences of mount *Sinai*. In this direction likewise the higher parts of it make such encroachments upon the plain, that they divide it into two, each of them capacious enough to receive the whole encampment of the *Israelites*. That which lieth to the eastward of the mount, may be the desert of *Sinai*, properly so called, where *Moses* saw the Angel of the Lord in the burning Bush, when he was guarding the flocks of *Jethro*. *Exod. iii. 2.* The convent of *St. Catharine* is built over the place of this Divine appearance. It is near three hundred foot square, and more than forty in height, being partly built with stone, partly with mud only and mortar mixed together. The more immediate place of the *Shekinah* is honoured with a little chapel, which this old fraternity of *St. Basil* hath in such esteem and veneration, that, in imitation of *Moses*, they put off their shoes from off their feet, when they enter or approach it. This

with

with several other chapels, dedicated to particular Saints, are included within the church, as they call it, of the *Transfiguration*, which is a large beautiful structure, covered with lead, and supported by two rows of marble columns. The floor is very elegantly laid out in a variety of devices in *Mosaic* work; of the same workmanship likewise are both the floor and the walls of the *Presbyterium*, upon the latter whereof is represented the figure of the Emperor *Justinian*, together with the history of the *Transfiguration*. Upon the partition, which separateth the *Presbyterium* from the body of the church, there is placed a small marble shrine, wherein are preserved the skull and one of the hands of *St. Catharine*.

"Mount *Sinai* hangs over this convent, being called by the *Arabs* (*Jibbel Mousa*) *The Mountain of Moses*, and sometimes only, by way of Eminence, (*El Tor*) *The Mountain*. *St. Helena* was at the expence of the stone stair-case, that was formerly carried up entirely to the top of it; but, at present, as most of these steps are either removed, washed out of their places, or defaced, the ascent up to it is very fatiguing, and frequently imposed upon their votaries as a severe penance. However, at certain distances, the Fathers have erected, as so many breathing places, several little chapels, dedicated to one or other of their Saints, who are always invoked upon these occasions, and, after some small oblation, are engaged to lend their assistance.

"The summit of Mount *Sinai* is somewhat conical, and not very spacious, where the *Mahometans* as well as *Christians*, have a small chapel for public worship. Here we were shewn the place where *Moses* fasted forty days, *Exod.* xxiv. 18. xxxiv. 28. where he received the law, *Exod.* xxxi. 18. where he hid himself from the face of God, *Exod.* xxxiii. 22. where his hand was supported by *Aaron* and *Hur*, at the battle with *Amalek*, *Exod.* xvii. 9, 12, &c. &c.

"After we had descended, with no small difficulty, down the western side of this mountain, we came into the other plain formed by it, which is *Rephidim*, *Exod.* xvii. 1.

NIEBUHR informs us, that

"The *Arabs* call *Jibbel Musa*, *The Mount of Moses*, all that range of mountains at the exterior extremity of the valley of *Faran*; and to that part of the range on which the convent of *St Catharine* stands, they give the name of *Tur Sina*. This similarity of name, owing, most probably, to tradition, affords ground for presumption, that the hill which we had now reached was the *Sinai* of the *Jews*, on which *Moses* received the law. It is, indeed, not easy to comprehend, how such a multitude of people as the *Jews*, who accompanied *Moses* out of *Egypt*, could encamp in those narrow gullies, amidst frightful and precipitous rocks. But, perhaps, there are plains, on the other side of the mountain, that we know not of.

"Two German miles and a half up the mountain, stands the convent of *St. Catharine*. The body of this monastery is a building one hundred and twenty feet in length, and almost as many in breadth. Before it stands another small building, in which is the only gate of the convent, which remains always shut, except when the bishop is here. At other times, whatever is introduced within the convent, whether men or provisions, is drawn up by the roof in a basket, with a cord and a pulley. The whole building is of hewn stone; which, in such a desert, must have cost prodigious expence and pains.

"Next day our *Schiechs* brought me an Arab, whom they qualified with the title of *Schiech* of Mount *Sinai*. Under the conduct of this newly created Lord of *Sinai*, with our *Schiechs*, I attempted to clamber to the summit of that mountain. It is so steep, that *Moses* cannot have ascended on the side which I viewed. The *Greeks* have

have cut a flight of steps up the rock. *Pococke* reckons three thousand of these steps to the top of the mountain, or rather bare, pointed rock.

"Five hundred steps above the convent, we found a charming spring, which, by a little pains, might be improved into a very agreeable spot. A thousand steps higher a chapel dedicated to the Blessed Virgin; and five hundred above this, two other chapels, situated in a plain, which travellers enter by two small gates of mason-work. Upon this plain are two trees, under which, at high festivals, the *Arabs* are regaled at the expence of the *Greeks*. My *Mahometan* guides, imitating the practices which they had seen the pilgrims observe, kissed the images, and repeated their prayers in the chapels. They would accompany me no farther; but maintained this to be the highest accessible peak of the mountain; whereas, according to *Pococke*, I had yet a thousand steps to ascend: I was therefore obliged to return, and content myself with viewing the hill of St. *Catharine* at a distance."

The result of these informations is, 1. That, there are *now* goats fed on this Mountain: so Moses fed his father Jethro's flock, (Exod. iii. 1.) and came to the Mountain of God, Horeb. Probably the flock he guided and guarded was not numerous, as it should seem that Moses was alone at the time. 2. That, there are *now* a considerable number of *Arabs* resident around it, or who occasionally visit it. 3. That, there are trees on it, that it yields dates, and that, by cultivation, its fruits are excellent: they are even sent as presents to the Bashaw of Cairo. 4. That the Mountain is seen from a great distance: so that any thing of a striking nature, as a storm of thunder and lightning, &c. may be seen on it even at the Red-Sea. 5. That, the *exterior* base is far from the central *peak* or greatest elevation of it, "two German miles and a half" [15 to a degree] says NIEBUHR. 6. That, there is no sufficient open space around the *peak* wherein a large camp might be arranged: though the valley adjacent to the convent of St. *Catharine* may hold many persons yet not many thousand persons: as it is but narrow and uneven. 7. That, there is a space of considerable length, (nine miles,) and breadth (three miles) before the exterior base of it. This in NIEBUHR's map is marked as a water-course; and it still retains the name of *Pharan*; which was antiently that of the district circumjacent. It is uncertain whether the camp of Israel stood in this open space, or in any other south of the mountain; but there is no place more suitable marked to the south in NIEBUHR's map of this neighbourhood.

Tradition is uniform in asserting, that the Convent of St. *Catharine* stands on the spot of the burning bush; and the stone, said to be the smitten rock, is on *this* side of the Mountain: so that, on the whole, there is no inducement to seek the place of the Israelitish camp to the Southward; and though we find Dr. SHAW in his map has traced the passage of the Israelites on the south of the mountain, or rather, over the mountain, yet that must be considered as an incorrectness in the Dr. who has marked his own passage in like manner; yet his account says, he entered from the North East. He has also placed as many rocks and hills to the south, as elsewhere around Mount Sinai, so that there is no supposeable opening there, of greater extent,
and

and fitter to contain a numerous host than the parts North of the Mountain.

It is to be observed, that one of the *peaks* into which Sinai is divided, is called SINAI (that *to the left*, in our plate) another is called HOREB (that adjacent to it, *to the right*, in our plate) so that sometimes what is said to have been done at Sinai, is said to have been done at Horeb; at other times, a distinction is observed, and one or other is specifically intended. We have not thought the distinction important, (our Plate includes both) but may sometimes put each for either. We shall observe some particular histories, in which this mountain has been singularly distinguished by Providence: and which become much more intelligible by a competent understanding of its geography, and appearance.

There seems to have been, in the instance of the giving of the law, *three distinctions of place* observed, by divine appointment; *first*, that occupied by the people at large, the furthest from the mountain: *secondly*, that occupied by the 70 Elders, and Joshua; probably that valley at the further end of which stands the convent of St. Catharine: *thirdly*, that more elevated part of the mountain, where Moses only was admitted. If this be just, then we have here the principles of the court of the people, the court of the priests, and the Holy Place itself, in after ages; all preparatory to the Holy of Holies, the understood residence of the Deity. [This seems to be confirmed by the mode of expression Exod. xix. 12. "Take heed, 1. go not up into the mount, 2. nor touch [approach] the *border* of it, lest ye die";—the exterior base of the mountain, that at the farthest distance from the *peak*.]

Moreover, it is certain, that the camp of Israel could not have been stationed where now stands the convent of St. Catharine, not only from want of space to contain it, but, from the circumstance, that Moses being so near it on the Mount must have seen all that passed in it: whereas, Moses is divinely informed (being ignorant himself) of the errors of the people, Exod. xxxii. 7. Yet Moses is described as *coming down* to Joshua; and Joshua as not distinguishing (by reason of distance, it may be supposed,) whether the noise in the camp was that of war, or of festivity, verse 17. Moses's *coming nigh* to the camp, verse 19, implies that he had walked some distance after joining company with Joshua.

When Moses is called "into the Mountain, he is directed to *come up* with Aaron, Nadab, Abihu, and 70 Elders, to worship afar off," Exod. xxiv. 1. but Moses only was to *come nigh* the Lord; and, verse 15, he *went up* into the Mount, i. e. to the higher parts, away from this company. Now if these elders were stationed half way up the mountain, say at B. the station of Niebuhr, when he took his second view of Sinai, they might be said to have *come up* the mountain, from the camp; yet to be *afar off* from the summit, or *peak* of it, to which Moses went, when he came nigh the Lord. Also, when it is said, verse 11, that God "laid not his hand on the 70 elders," it should seem

seem to import their reverential distance from his immediate presence, and, at such a distance they might "eat and drink," not merely without danger, but without impropriety. Thus the two phrases whose use has embarrassed commentators are reconciled by the geography of the place: for, the elders did not break the prohibition by advancing from the camp to this part of the mountain, therefore God laid not his hand of *punishment* on them: Moreover, *they* did not fast, as Moses did, when admitted to near communication with the divine power, but ate and drank, as usual, without restriction: while at the same time they were so placed, as to see the summit of the mountain without impediment—and from this distance, as it may be thought, they could discern evident appearances of the God of Israel, yet were too far off to *gaze*, or to be *intrusive*: in which sense "No man hath seen God, at any time."

—It is notorious, that peculiar veneration has been paid to a certain spot on Mount Sinai, where has been a Convent, time out of mind; for, it is well understood that the present Convent is only a successor to one more antient. May we ask, then, whether it be credible, that an institution of a similar nature was here in the days of Elijah? 1. Kings, xix. 8.—If so, when that prophet intended to visit Horeb, the Mount of God, he did not mean absolutely to withdraw to a mere solitary desert, but, he proposed to seclude himself in the remotest establishment of the kind (probably too, the meanest) which he knew of, where sons of the prophets were associated; as far removed from the power of Jezebel as personal safety required; and, it may be, beyond the dominion of that idolatrous queen of Israel. As to his "lodging there in a cave," verse 9, as rendered in our translation, this, he might do *constantly*, notwithstanding better accommodations; or, he might occasionally visit the summit of the mountain, and on one of these visits he might sleep on the rock, in some station, not unlike the sleeping place of BAUMGARTEN and his companions.

But the strictest sense of the words seems to be preferable; he went unto the [sacred] place, to THE cave," or cavity, [with the π demonstrative] *q.* that where Moses had been screened by divine power? Exod. xxxiii. 22. "and passed a night in the [sacred] place."—Here, as he hoped, and expected, the word of the Lord came to him: and from hence he went forth to stand on the mount, before the Lord, verse 11. We make no account of the idle tales of the Greek Monks told on the spot; our remarks dismiss the whole of them; and indeed they are unworthy of notice, as is hinted by Dr. SHAW.

It is probable, that trees of some kind (e. gr. palms bearing dates) grew on this mountain, &c. in the days of Elijah, as fruits do at present; but, whether any Jewish (religious) establishment might have been supported by them, alone, is uncertain. We cannot help observing the very frugal fare of the present inhabitants of this Convent, who yet are numerous, (150); we know, too,

too, that antient eremitical fare was no less abstemious than the modern is, and such would coincide with the view of Elijah in his retirement, as it would with that of whoever made this spot their residence. The prophet who had been supported by the casual bounties of a *rookery*, might now be content with the wild fare of Mount Horeb, the bushes of which yielded him fruit and the springs water.

The following thoughts, on another subject, are submitted with great deference.

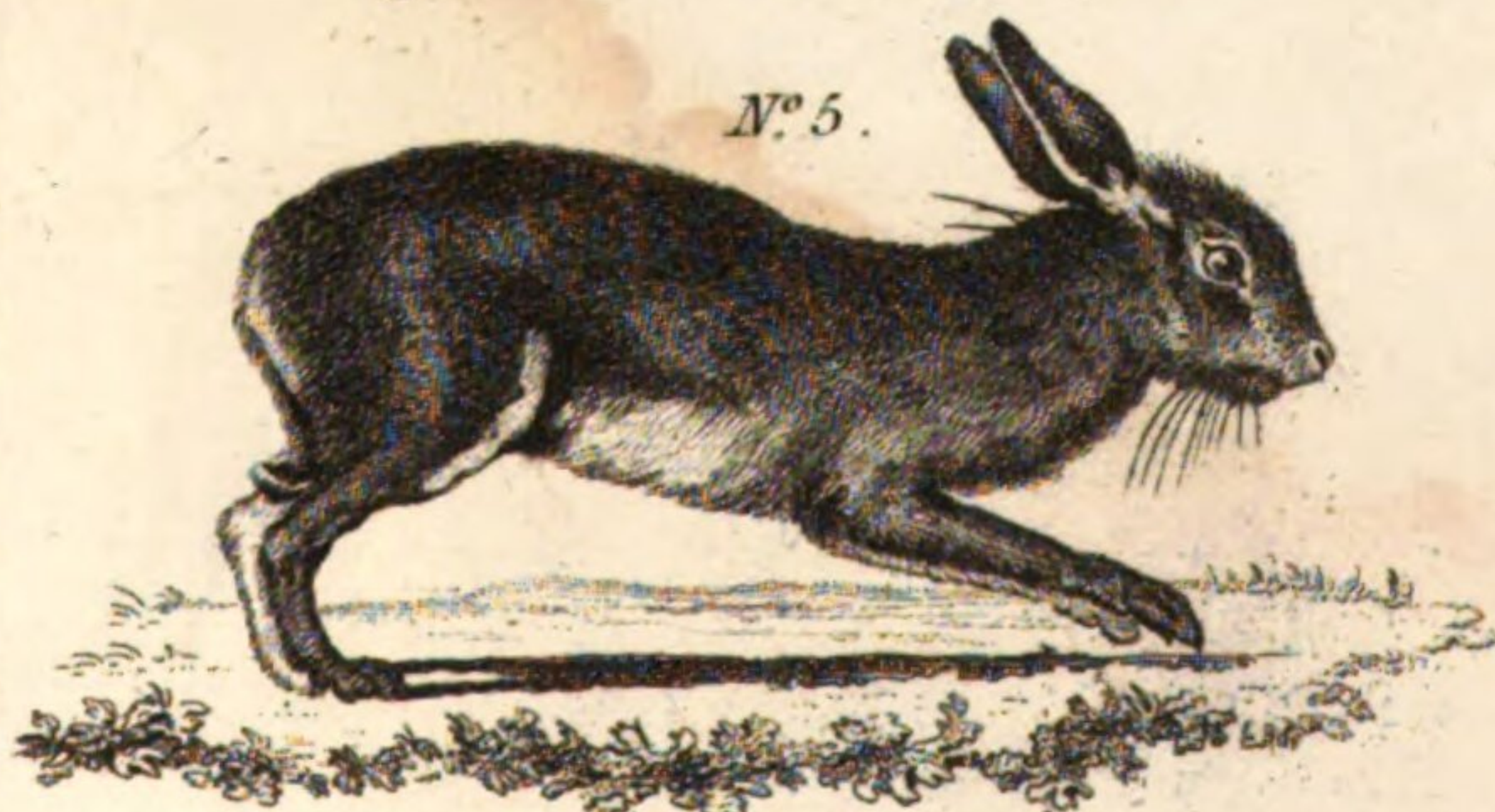
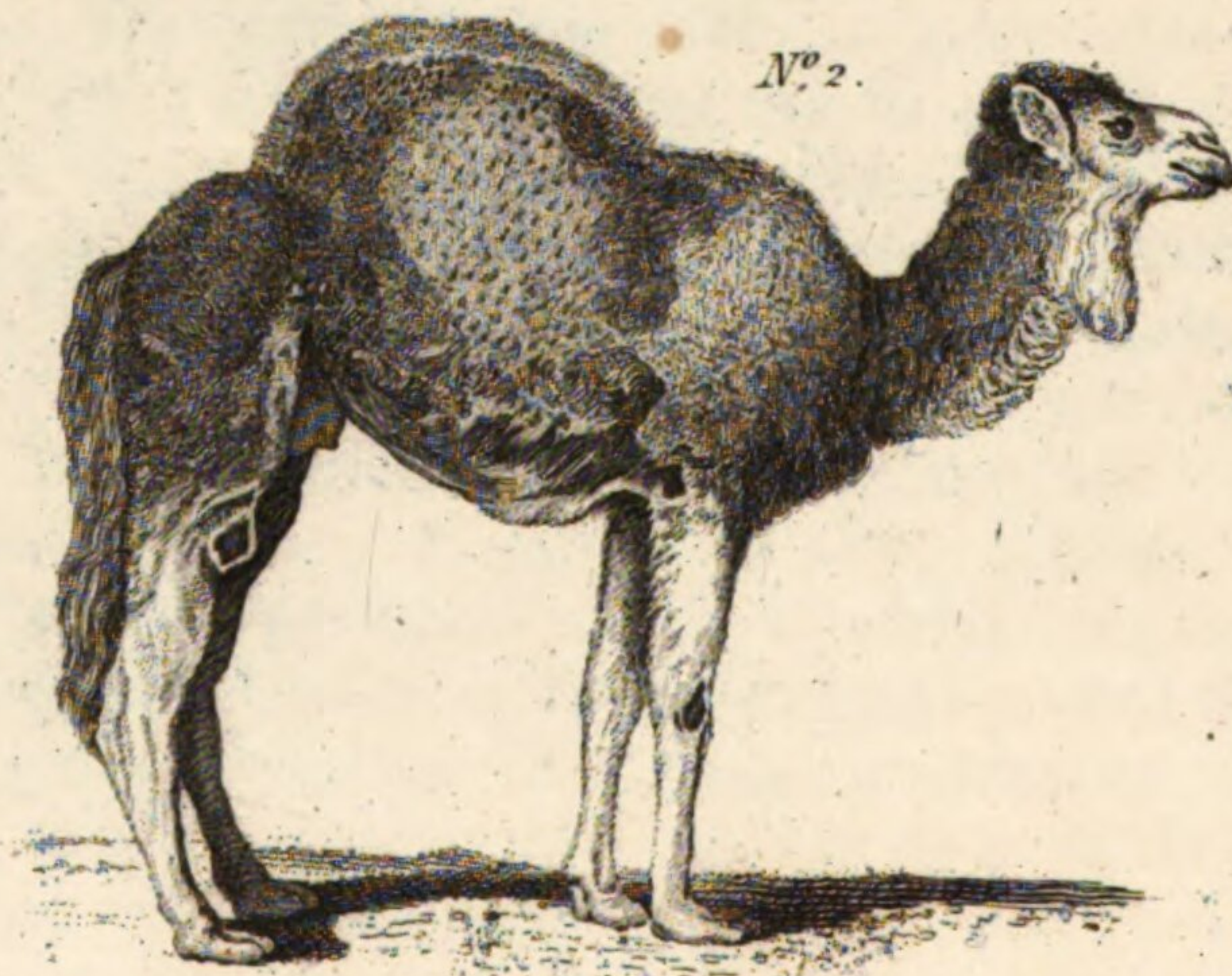
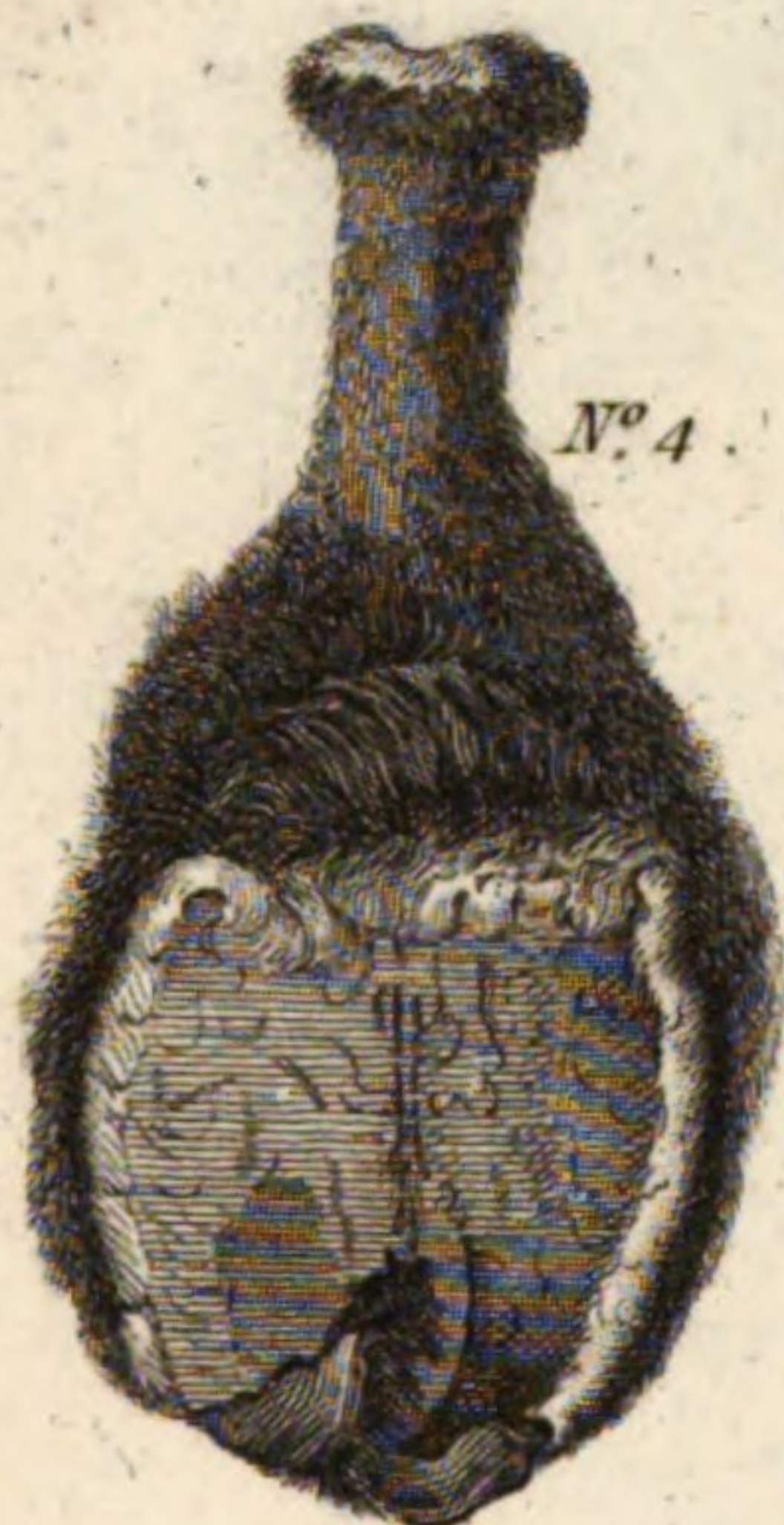
It is well known that neither critic, commentator, nor version, has been able correctly to explain the phraseology Deut. xxxiii. 3. Whoever doubts this will be convinced on consulting the *long* note of Dr. GEDDES *in loc.* As the subject is geographical let us try the effect of Geography on it. Comparing the Deity to the Sun, the Poet says 1. "JEHOVAH over Sinai dawned—Sinai is the Mountain of that name: 2. *And he rose like the Sun over Seir*, taken as the general name of the promontory, *to us* [Sep. Onk. Syr. Vulg.] 3. *He shone over Mount Paran*, taken for the mountains at the extremity of the base of Sinai, where the camp of Israel was in the valley of Paran [or, those on the other side of the valley of Paran] 4. *He came* [i. e. his rays] *over Meribah Kadesh*, "the waters of strife," where he shewed his [rectitude] holiness, by supplying the thirst of his people; *over the waters of Ashdoth*, or copious flowing springs *to us*." This last verse seems to contrast with the torrent of Paran, in whose bed the camp of Israel stood, which had [and has] water in it only at certain times, being otherwise generally dry: whereas, these springs says the Poet, were copious and permanent. Thus understood, every word in the passage is correct; every place is in the neighbourhood of Sinai, and the metaphor of the Sun, progressively advancing from its dawn to its rise—from its rise to its strength, is strictly supported. It is even possible, that the metaphor is drawn from actual observation of nature on the spot. 1. In the morning the lofty peak of Sinai receives the earliest inflections of light: then the light spreads over the surrounding mountains of Seir, of which Sinai is the highest: 2. At noon it diffuses itself over mount Paran;—being South, it shines on the opposite hills, those beyond the valley of Paran: in the afternoon it illuminates the waters of Meribah; and lastly it visits the permanent springs—*Ashdoth*. Compare the course of historical events with this course of the Sun: Sinai—Exod. xix. 20. Seir and Paran—the subsequent transactions in the station and camp: Meribah Kadesh,—copious streams.—Numb. xx. 2—14.

PLATE I. View of Mounts Sinai and Horeb, taken at a considerable distance up Mount Sinai. It shews the *peaks* of those Mountains; the convent of St. Catharine, over the place of the burning bush; the garden of the Monks, &c.

PLATE II. Another view of Mount Sinai, from a further distance; shewing its appearance as seen from the valley wherein the Convent stands.

The upper figure is a Map of Sinai, as actually walked over by NIEBUHR; whose track is marked on it. A. His station when he delineated the first view. B. His station for the second view.





UNCLEAN ANIMALS.

EXPLANATION OF THE LAWS OF THE HEBREW ANIMALS

LEVITICUS, CHAP. XI. VER. 4, &c.

EVERY animal which we see, though it may be different in its nature, according to the purposes of its formation; and though the laws of its construction are different, he will always reckon those which are adapted to the same purpose, the legs and the feet. These appear to have been the original disposition adopted equally by Moses of old, as by Legislators of late; for indeed, the Hebrew law is not only a law of nature, but a law of reason, and a law of equity, for food, &c. is shown by means of these divisions which Nature has appointed to their feet.

Swiftness, or animals of one hoof, such as the Horse and the Ass, are unclean; Pigeons, or animals of hoofs divided into two parts, are clean; but then this division must be entire, not partial, effective, not abounding, and the feet must be entire, not divided, its interval, its anatomical construction, must also be correctly correspondent to this formation. Moreover, animals whose feet are divided into more than two parts are unclean; so that the number of their toes, as three, four, or five, is reason sufficient for entire rejection of them, whatever qualities they may possess.

It appears to be the principle of the Levitical distinction, between the clean and unclean, as derived from their feet: their construction is a distinguishing character; but a character absolutely unavailing without the more obvious and evident marks apparent in the construction of their members.

We may, I think, consider the animal mentioned in this passage, as instances of a rule designed for general application. The law excludes, 1. All whose feet are not, by one cleft, thoroughly divided into two parts; as for example the CAMEL. 2. All whose feet, though thoroughly divided by one cleft into two parts externally, yet internally, by the construction of their hoofs, differ from the character of the permitted kinds; as the SWINE. 3. All whose feet are thoroughly divided by two clefts into three toes; as the BAALE. 4. All whose feet are thoroughly divided by three clefts into four toes, as the BAALE; and therefore, a fourth, if there be any animals whose feet are divided into five toes, they are so much farther removed from the character required to mark them as permitted. [See the text, and Plate.]

It is proper to recollect, that ramification is one character necessary to the clean, yet the Sapien, though it ramifies, is proscribed; and the Hare, though it does not ramify, yet must be reckoned unclean, by reason of the construction of its feet. This, then, seems to be the legislative Nature's most obvious distinction; a distinction which the eye of the unlearned might appropriate at sight, and therefore adapted to public affirmation.

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For



EXPLANATION OF THE PLATE OF UNCLEAN ANIMALS.

LEVITICUS, CHAP. XI. VER. 4. &c.

EVERY naturalist must arrange those animals which he professes to study according to the peculiarities of their formation; and among the most conspicuous of their members, he will always reckon those which are adapted to motion, the legs and the feet. These appear to have been the medium of distinction adopted equally by Moses of old, as by Linnæus of late; for indeed, the Mosaic line of *permission* and *exclusion* of animals for food, &c. is drawn by means of those divisions which Nature has appointed to their feet.

SOLIPEDES, or animals of one hoof, such as the Horse and the Ass, are unclean: FISSIPEDES, or animals of hoofs divided into *two* parts, are clean; but then this division must be entire not partial, effective not seeming, only; and beside its external construction, its internal, its anatomical construction, must also be correctly correspondent to this formation. Moreover, animals whose feet are divided into *more than two parts* are unclean; so that the number of their toes, as *three, four, or five*, is reason sufficient for entire rejection of them, whatever qualities they may possess.

Such appears to be the principle of the Levitical distinction between animals clean and unclean, as derived from their feet: their rumination is a distinct character; but a character absolutely unavailing without the more obvious and evident marks apparent in the construction of their members.

We may, I think, consider the animals mentioned in this passage, as *instances* of a rule designed for general application. The law excludes, 1. All whose feet are not, by *one cleft, thoroughly* divided into *two* parts; as for example the CAMEL. 2. All whose feet, though thoroughly divided by *one cleft* into *two* parts externally, yet internally, by the construction of their bones, differ from the character of the permitted kinds; as the SWINE. 3. All whose feet are thoroughly divided by *two clefts* into *three toes*; as the SAPHAN. 4. All whose feet are thoroughly divided by *three clefts* into *four toes*, as the HARE; and therefore, *a fortiori*, if there be any animals whose feet are divided into *five* toes, they are so much farther removed from the character requisite to mark them as permitted. [*Vide* the BAT, and Plate.]

It is proper to recollect, that rumination is one character necessary to lawfulness, yet the Saphan, though it ruminates, is proscribed; and the Hare, though it also ruminates, yet must be reckoned unclean, by reason of the construction of its feet. This, then, seems to be the legislative Naturalist's most obvious distinction; a distinction which the eye of the unlearned might appropriate at sight, and therefore adapted to public information.

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For

LEVITICUS, CHAP. XI. VER. 4, &c.



UNIVERSITY OF MICHIGAN

EXPLANATION OF THE PLATE OF UNCLEAN ANIMALS.

LEVITICUS, CHAP. XI. VER. 4. &c.

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Such appears to be the principle of the Levitical distinction between animals clean and unclean, as derived from their feet: their rumination is a distinct character; but a character absolutely unavailing without the more obvious and evident marks apparent in the construction of their members.

We may, I think, consider the animals mentioned in this passage, as *instances* of a rule designed for general application. The law excludes, 1. All whose feet are not, by *one* cleft, *thoroughly* divided into *two* parts; as for example the CAMEL. 2. All whose feet, though thoroughly divided by *one* cleft into *two* parts externally, yet internally, by the construction of their bones, differ from the character of the permitted kinds; as the SWINE. 3. All whose feet are thoroughly divided by *two* clefts into *three* toes; as the SAPHAN. 4. All whose feet are thoroughly divided by *three* clefts into *four* toes, as the HARE; and therefore, *a fortiori*, if there be any animals whose feet are divided into *five* toes, they are so much farther removed from the character requisite to mark them as permitted. [*Vide* the BAT, and Plate.]

It is proper to recollect, that rumination is one character necessary to lawfulness, yet the Saphan, though it ruminates, is proscribed; and the Hare, though it also ruminates, yet must be reckoned unclean, by reason of the construction of its feet. This, then, seems to be the legislative Naturalist's most obvious distinction; a distinction which the eye of the unlearned might appropriate at sight, and therefore adapted to public information.

A

For

LEVITICUS, CHAP. XI. VER. 4, &c.

For the history and plate of the SAPHAN, and the construction of its feet especially, *vide* on Proverbs, xx. 26. We have not thought it necessary to repeat the figure on the plate before us; neither shall we enlarge on creatures of which the general habits and history are known: merely to identify and delineate them may be sufficient.

No. 1. 2. The CAMEL and DROMEDARY. These are probably, only varieties of the same species: notwithstanding one has two humps, and the other has only one. These fleshy excrescences are of a soft and gristly nature, and are not supported by bones or other permanent connexions, whereby they might become parts of the solid structure of the animal. The general properties and services of this creature, its adaption to the sands of the desert, its capability of carrying great weights, its long endurance of thirst, its docility and its irascibility, are very well known.

No. 3. The *upper* part of the foot of a Camel, shewing a *sulcus*, or kind of groove-like division, running down it, but not entirely dividing it.

No. 4. The *under* part of the same foot, shewing that on the sole of the foot there is a line corresponding to the line above; but it is partial, and feebly marked; so that the foot can by no means be said to be divided or cloven: and by this want of *entire division* the animal is rendered unclean.

No. 5. If the Camel be unclean, by reason of the want of entire division of its hoofs, in this number we find the Hare is unclean, by reason of too many divisions in its feet. We have no need to enlarge on an animal so well known; But we have given in

No. 6. The bones of the foot of a Hare, shewing the entire division of this member into *four* parts, which being more than the law ascribes to clean animals, renders this animal unclean by too much separation, as the Camel is unclean by too little.

No. 7. The Wild Boar, which is usually thought to be the parent of the swine kind. It inhabits Asia as well as Europe, and retains its characters and manners in almost every climate. On the feet we remark, that though their outward appearance be like that of a cloven-footed animal, yet *internally* they have the same number of bones and joints as animals which have fingers and toes; so that the arrangement of their feet-bones is into first, and second, and third *phalanges*, or knuckles, no less than that of the human hand. Beside, therefore, the absence of rumination in the hog kind, its feet are not accordant with those of such beasts as are clean, according to the Levitical regulations.

N^o 2.



N^o 1.



N^o 4.



N^o 3.



MAP OF THE COUNTRY, FROM SUEZ TO MOUNT SINAI:

COPIED FROM NIEBUHR.

EXODUS, CHAPTERS XIII—XIX.

Geography and Chronology are the two eyes of History; yet, very rarely is Geography purged from those films to which it is naturally subject. The task is not easy; for, to accomplish it, requires no less than personal acquaintance with the country which it describes; and this is not always possible. The utmost we can do is, to collect from those who have travelled there, what accounts they offer; and to correct the judgment of one traveller by that of another, who may have had superior advantages, and, probably, better information.

As the celebrity of Mount SINAI has induced many persons to visit it, we are happily relieved from the necessity of depending on one only; we shall therefore, to the narrations of Dr. SHAW, who was certainly a man of observation, but not a correct draughtsman, subjoin that of NIEBUHR, whose map we presume to think is the most faithful of any yet published. Moreover, as Dr. SHAW travelled the very course which Moses and the caravan of Israel had travelled so many ages before him, his remarks cannot fail of being interesting and acceptable. *Travels*, p. 348, *Folio Edit.*

“Corondel, I presume, made the southern portion of the desert of Marah; from whence to the port of Tor, the shore, which hitherto was low and sandy, begins now to be rocky and mountainous, whilst that of Egypt is still more impracticable, and neither of them affords any convenient place, either for the departure or the landing of a multitude. Moreover, from Corondel to Tor, [1] the channel is ten or twelve leagues broad, too great a space certainly for the Israelites, in the manner at least they were encumbered, to traverse in one night. And, at Tor, the Arabian shore begins to wind itself, (round what we may suppose to be Ptolemy’s Promontory of Paran) towards the Gulph of Eloth: at the same time the Egyptian retires so far to the S. W. that it can scarce be perceived. The Israelites therefore could neither have landed at Corondel nor Tor, according to the conjectures of several authors.

“Over against Jibbel At-tackah, at ten miles distance, is the desert, as it is called, of *Sdur*, the same with *Shur*, Exod. xv. 22. where the Israelites landed, after they had passed through the interjacent gulf of the Red Sea. The situation of this Gulf, which is the [*Jam Suph* יַם סוּף]—the Weedy Sea, in the Scriptures, the Gulf of *Heroopolis*, in the Greek and Latin Geography, and the Western Arm, as the Arabian geographers call it, of the Sea of Kolsun, lieth nearly north and south; in a position very proper to be traversed by that strong east wind which was sent to divide it, Exod. xiv. 21. The division that was thus made in the channel, the making the waters of it to stand on a heap (Psalm lxxviii. 13,) their being a wall to the Israelites on the right hand and on the the left, (Exod. xiv. 22.) besides the distance of at least twenty miles, that this passage lieth below the extremity of the Gulf, are circumstances which sufficiently vouch for the miraculousness of it, and no less contradict all such idle suppositions as pretend to account for it, from the nature and quality of tides, or from any such extraordinary recess of the sea, as it seems to have been too rashly compared to by Josephus.

“In travelling from *Sdur* towards *Mount Sinai*, we come into the Desert, as it is still called, of Marah, where the Israelites met with those bitter waters, or waters of Marah, (Exod. xv. 23.) And as this circumstance

EXODUS XIII—XIX.

circumstance did not happen, till after they had wandered three days in the wilderness, we may probably fix it at Corondel, where there is a small rill of water, which, unless it be diluted by the dews and rains, still continues to be *brackish*. Near this place, the sea forms itself into a large bay, called *Berk el Corondel*, which is remarkable for a strong current, that sets into it from the northward. The Arabs preserve a tradition, that a numerous host was formerly drowned at this place; occasioned, no doubt, by what we are informed of Exod. xiv. 30, that the Israelites saw the Egyptians dead upon the sea shore.

"There is nothing further remarkable, till we see the Israelites encamped at Elim. Exod. xv. 27. Numb. xxxiii. 9. upon the northern skirts of the Desert of *Sin*, two leagues from Tor, and near thirty from Corondel. I saw no more than nine of the twelve wells that are mentioned by Moses, the other three being filled up by those drifts of sand, which are common in Arabia. Yet this loss is amply made up by the great increase of the Palm trees; the *seventy* having propagated themselves into *more than two thousand*. Under the shade of these trees is the (*Hammam Mousa*) Bath of Moses, which the inhabitants of Tor have in extraordinary esteem and veneration; acquainting us, that it was here, that Moses himself and his particular household, were encamped.

"We have a distinct view of Mount Sinai from Elim; the wilderness, of *Sin*, as it is still called, lying betwixt us. We traversed these plains in nine hours, being diverted, all the way, with the sight of a variety of lizards and vipers, that are here in great numbers. I had not the good fortune to see the famous inscription, that is said to be engraven upon the rocks, just as we turn into the valley that conducts us to Mount Sinai. *Sin* was the first place where God gave the Israelites manna. Exod. xvi. 14, and therefore some authors have imagined, that these characters were left, as a standing monument of that blessing, to future generations.

"From Mount Sinai, the Israelites directed their marches, northward, towards the land of Canaan. The next remarkable stations, therefore, were in the desert of Paran, which seems not to have commenced, till after they departed from Hazeroth, three stations from Sinai, Numb. xii. 16. Now as tradition hath preserved to us the names of *Shur*, *Marah*, and *Sin*, so we have also that of *Paran*, which we enter at about halfway betwixt Sinai and Corondel, in travelling through the midland road, along the defiles of what were probably the "Black Mountains" of Ptolemy. In one part of it, ten leagues to the northward of Tor, there are several ruins, particularly of a Greek convent (called the Convent of *Paran*) which was not long ago abandoned, by reason of the continued insults which they suffered from the Arabs. Here likewise we should look for the city of that name, though according to the circumstances of its situation, as they are laid down by Ptolemy, Tor, a small maritime village, with a castle hard by it, should rather be the place.

"It would be too daring an attempt to pretend to trace out all the particular encampments that are mentioned, Numb. xxxiii. the greatest part whereof were confined to this small tract of Arabia Petræa, which I have just now described. However this much may be added, that, after the Israelites left Mount Sinai, the most southern of their stations seems to have been Ezion-gaber [2]; which being the place from whence Solomon's navy went for gold to Ophir (1 Kings ix. 26. 2 Chron. viii. 17) we may be induced to take it for the same with what is called at present (*Meenah el Dsahab*) the Port of Gold. According to the account I had of it, from the Monks of Sinai, it lieth in the Gulf of Eloth, at the distance of two days journey from them, enjoying a spacious harbour, which supplieth them sometimes with plenty of lobsters and shell fish."

We shall now direct our attention to NIEBUHR. *Travels*, Vol. I. p. 175, &c.

"The city of Suez stands upon the western side, but not just upon the western extremity, of the Arabic Gulf. It is not surrounded with walls; but the houses are built so closely together, that there are only two passages into the city, of which that nearest the sea is open, the other shut by a very insufficient gate. The houses are very sorry structures; the *kans* being the only solid buildings in the city. Hardly any part now remains of the castle which the Turks built upon the ruins of the ancient Kolsum.

"It is very thinly inhabited. Among its inhabitants are some Greeks, and a few families of Copts. But, about the time of the departure of the fleet, it is crowded with strangers.

"The ground lying around it is all one bed of rock, slightly covered with sand. Scarcely a plant is to be seen any where in the neighbourhood. Trees, gardens, meadows and fields, are entirely unknown at Suez. Fish is the only article of provisions plentiful here. All other necessities of life, for both men and the domestic animals, are brought from afar; from Cairo, which is three days journey distant from Suez; Mount Sinai, at the distance of six days journey; or Ghasso, at the distance of seven.

"At Suez there is not a single spring of water. That at Bir Suez is scarcely good enough for cattle; but it is drawn to Suez, twice a day, for their use. The water of the pretended wells of Moses is still worse; and besides, these wells lie at a league and a half distance, on the other side of the Gulf. The only water fit for drinking that is to be had here, comes from the wells of Naba, upon the other side of the Gulf, and more than two leagues distant from Suez. The Arabs are the carriers; and they sell this water at the rate of nine French *sols* a skin; but, though reputed the best, it is still very bad. [3]. "The

"The Arabs who live about Tor, [1] upon the other side of the Gulf, are little afraid of the Turkish governor of Suez. When dissatisfied with him, or with the inhabitants of the city, they threaten to bring no more water, and forbid them to come near the wells of Naba. These threats, if carried into execution, would reduce the city to the last extremities; and all means are, therefore, used to pacify them.

"On the 6th of September, 1762, we crossed the Gulf, and set out next morning with our Arabs. The first day we travelled along the coast of the Arabic Gulf, through a sandy plain, having a few hills scattered over it. The Arabs call plains, which lie somewhat low, *Wadi*, [4] or valleys, because water remains stagnant in them, after heavy rains. We rested under a palm-tree, in a place called *Aijoun Musa*, Moses' Fountains. These pretended fountains, are five holes in the sand, in a well of very indifferent water, that becomes turbid, whenever any of it is drawn. As the holes bear the name of Moses, the Arabs ascribe them to the Jewish law-giver. After a day's journey of five German miles and a half, we encamped on the sand, in the plain of El-Ti. In the evening, a violent blast of wind raised the sand about us, by which we were not more incommoded than a similar incident would have incommoded us in Europe.

"The country through which we passed, is famous as the scene of the emigration of the Jews, under Moses. We were therefore desirous of learning from the Arabs, the names of all the places, and of all the mountains, especially, in our way. I likewise measured the distances of places, by counting the steps of the camel, and comparing the number with the time in which they were travelled, by my watch. By means of a compass, I distinguished, likewise, the directions of the road. None of the Arabs understood the nature of this instrument. It is plainly, therefore, an idle tale, that they follow the direction of the compass, in travelling through their deserts.

"On the 8th of September we travelled through the plain of Girdon. We saw, on our way, an enormous mass of rock, that had fallen from a neighbouring mountain. We entered next the valley of Girondel, and, after proceeding five miles and a half further, found ourselves in the vicinity of *Jibbel Hammam Faraun*. In the rainy season a considerable torrent runs through the valley of Girondel. [4] It was at this time dry; yet, by digging in the bed, to the depth of two feet, we found better water than that which is used at Suez. This valley not being deficient in water, has in it several trees, and even groves, that appear singularly striking to travellers from Cairo who have seen no similar appearance in the previous part of their journey.

"*Hammam Faraun* is the name of a hot spring which rises by two apertures out of a rock, at the foot of a high mountain. It is used in baths by the neighbouring sick, who commonly stay forty days for a cure, during which their only food is a fruit, called *Lassaf*, which grows here. An extensive burying place near the baths, suggested doubts in my mind of the beneficial effects of this regimen. The tradition that the Jews passed this way, and that Pharaoh's army was drowned here, has occasioned this place to receive the name of *Birket-el-Faraun*. The Arabs imagine that Pharaoh is doing penance at the bottom of this well, and vomits up the sulphureous vapour with which the water is impregnated.

"This eastern side of the Arabic Gulf is tolerably level and uniform. But the opposite side is one range of lofty mountains; broken, however, and divided by two vales, by one of which we must pass in travelling from Egypt to the shore of the Red Sea.

"We turned, by degrees, towards the north-east, in pursuing the direct road to Mount Sinai, and at length entered a narrow vale, which appeared to have been cut by the torrents in the rock. The mountains which rose upon every side of us, in uninterrupted chains, were masses of a sort of limestone intermingled with veins of granite. In several places through them, I discovered a quantity of petrified shells, of a species which is to be found with the living shell-fish in it, in the Arabic Gulf. One of those hills is entirely covered with flints. The granite becomes more and more plentiful as we approach Mount Sinai.

"Our road lay often along the brink of precipices, commonly through stony glens, and sometimes through wide valleys, watered and fertile. Such were *Usaitu*, *El Hamer*, and *Warsan*. We passed also, in our way by *Nasbe*, the seat of some Bedouins of this country. As water was sometimes at a distance from the places where we encamped, our servants were obliged to go to bring it. We could have wished to accompany them, in order to see a little of the country; but our guides would not always permit us. After passing through the valley of Warsan, we turned a little out of the highway, and the same evening reached the abode of our chief of the tribe of Leghat.

"Being determined to proceed on to Mount Sinai, we set out from the dwelling of our Schiech of Beni Leghat, on the 12th of September. The country became more mountainous as we advanced; yet we passed through some pleasant valleys; such were those at *Chamela*, *Dabur*, *Barak*, and *Genna*. Before reaching the vale of *Israitu*, which, although surrounded with rocky and precipitous mountains, displays some rich and cheerful prospects, we were obliged to go over another lofty and almost inaccessible hill.

"At the distance of nearly seven German miles from the dwelling of our Schiech of the tribe of Leghat, we found the abode of our other Schiech of the tribe of Said. The Arabs set up our tents near a tree, in the valley of *Faran*, and left us to amuse ourselves there in the best manner we could, till they went to see their friends in gardens of date-trees, scattered over the valley. We were at no great distance from

our Schiech's camp, which consisted of nine or ten tents. We were informed that the ruins of an ancient city were to be seen in the neighbourhood. But, when the Arabs found us curious to visit it, they left us, and would give us no farther account of it.

"The famous valley of *Faran*, in which we now were, has retained its name unchanged since the days of Moses, being still called *Wadi Faran*, the Valley of Faran. Its length is equal to a journey of a day and a half, extending from the foot of Mount Sinai to the Arabic Gulf. In the rainy season it is filled with water; and the inhabitants are then obliged to retire up the hills: it was dry, however, when we passed through it. That part of it which we saw was far from being fertile, but served as a pasture to goats, camels, and asses. The other part is said to be very fertile; and the Arabs told us, that, in the districts to which our Ghasirs had gone, were many orchards or date trees, which produced fruit enough to sustain some thousands of people. [5] Fruit must, indeed, be very plenteous there; for the Arabs of the valley bring every year to Cairo an astonishing quantity of dates, raisins, pears, apples, and other fruits, all of excellent quality. Some Arabs, who came to see us, offered us fresh dates, which were yellow, but scarcely ripe. The chief of our Schiech's wives (for he had two) came likewise to see us, and presented us with some eggs and a chicken. One was placed at some distance from where our tents happened to be pitched, in order to manage a garden of date-trees. [6] The other was our neighbour, and superintended the cattle and servants.

"We left this place 14th of September, and, after travelling two (German) miles farther, in the valley of *Faran*, arrived at the foot of *Jibbel Musa*. Up this mountain we ascended a mile and a half, and encamped near a large mass of stone, which Moses is said by the Arabs to have divided into two, as it at present appears, with one blow of his sword. Among those mountains we found several springs of excellent water, at which, for the first time since my arrival in Egypt, I quaffed this precious liquid with real satisfaction.

"In the afternoon of the 16th of September, we descended *Jibbel Musa*, and passed the night at the bottom of that clifty mountain, at the opening into the valley of *Faran*. [7] Next day, after advancing three miles through the vale, we halted near the dwelling of our Schiech of the tribe of Said. Our Ghasirs left us again, and went to see their friends in the gardens of date trees. Our Ghasirs returned, and we continued our journey on the 20th of the month. On the day following we had an opportunity of seeing a part of the road which we had passed by night, when travelling to *Jibbel Musa*. In this place, near a defile, named *Omzer-ridg-lein*, I found some inscriptions in unknown characters, which had been mentioned to me at Cairo. They were coarsely engraven, apparently with some pointed instrument of iron, in the rock [8] without order or regularity.

"On the 25th of September we arrived again at Suez. Before we could reach the city we had to cross the same arm from the sea, over which we had been ferried when we set out on our journey; but we could find no boat on the eastern side. Perceiving, however, that the tide was ebbing, we ventured to ford this part of the gulf. We succeeded happily, a little north from the ruins of Kolsum. Our camels walked steadily; and the Arabs who waded, were only in water, to the knees. This was perhaps the first time that any Europeans attempted to pass here in this manner. This attempt shewed us that the waters in the gulf are much influenced by the tides, and convinced us, that in the ebb, the Red Sea may be safely passed on foot.

"After my return to Suez, I was desirous to examine also the western side of the Gulf, and the adjoining hills. I could prevail with no person to accompany me in so dangerous an expedition, for, at the smallest distance from the city, the passenger is in no less danger of being robbed, than in the desert. At length, however, an Arab undertook to be my guide. But he trembled at the sight of every human being that we met; and indeed those whom we met, seemed to be no less afraid of us. Thus teased and vexed as I was, I could make but few interesting observations in these petty excursions.

"In the neighbourhood of Suez I could find no trace of any canal; unless the valley of *Mosbeih*, between Bir Suez and the city, may be regarded as such. After the rains, a considerable quantity of water remains stagnant in this vale, which the inhabitants draw for use; and when the waters are gone off, it is soon covered with grass." [9]

Such is the character of this region as it appears in *Heron's* translation of *NIEBUHR*. I shall now [from *Fr. Edit*] translate, in addition, *NIEBUHR's* account of the Desert of Sinai, as it accompanies his map: extracting only what may be usefully employed in illustrating Scripture.

"The Arabic name of the country, situated between the two arms of the Gulf of Arabia, is called, I believe, *Bahr el Tour Sinai*, the *Desert of Mount Sinai*.

Sinai. This country, so famous anciently, is now almost uninhabited: only a few villages now stand on its coast; whose inhabitants live wholly by their fishing. The whole interior of the country belongs to wandering and independent Arabs. [10]

“The eastern arm of the Arabian Gulf, which the natives call *Bahr el Akaba*, is commonly delineated very wide on our maps; but, according to the accounts which I received, it is not wider than admits of people on one side of it, calling to others on the opposite side, and being heard. At the further end of this gulf is the ancient city of *Ailah*, called *Eloth* in Scripture.

“On the western arm of this gulf is the well known port of *Tor* or *Bender Tor*, where the vessels going from *Sues* to *Djidda* land, because they take, *gratis*, a tolerable water from a well near the port; and they purchase, at a low price, a still better water, brought from the mountains.

“The elevated mountain of *Saint Catherine* stands N. E. six, or six and a half German miles from *Tor*, adjacent to *Mount Sinai*, *Mount Sinai* is but the highest peak of a chain of mountains, at the foot of which is the famous Greek convent. The Mount and its convent stands on a mountainous mass, which our Arab guides called *Dsjebbel Musa*, and which is many days' journey in circuit. It is composed in great part of gritstone; there is also granite; and the *Sinai* of the Christians, near the convent, is almost wholly a rock of red granite of a very large grain.

“The *Mount of Moses* has numerous beautiful springs [11]; nevertheless they are not so copious as to be united, and to form streams which might last the whole year. It seems, rather, that the valleys of the *Mount of Moses* only furnish water after heavy rains. Here are fertile valleys, in which are gardens planted with vines, pear trees, dates, and other excellent fruits.—*I did not go to the west of Sinai*.

“The valley of *Faran* is at the northern foot of the *Mount of Moses*, two and a half German leagues N. W. from the convent. Very fine fruits are found in abundance in this and the neighbouring valley. It was entirely dry in September; nevertheless, the *Wadi Farân* becomes sometimes, after heavy rains, a torrent so considerable, that the Arabs are obliged to pitch their tents on the declivities of the mountains. The Arabs draw from the springs a water which is tolerable, but not so good as that found on the Mountain of *Moses*.

“The valley of *Girondel*, like that of *Faran*, is inundated after great rains. In September it was so dry that we were obliged to dig for water, a foot or foot and a half into the sand. This water, though inferior in goodness to that of the *Mount of Moses*, is yet better than that of *Sues*. I had neither the time nor the desire to stop long enough to examine whether this water is alternately sweet and bitter, (as *MICHAELIS* enquires, *Quest. ii. xviii. xix.*) During this journey we rarely encamped by a fountain; and as I had asked sometimes

sometimes to accompany those who fetched water, our guides always afterwards sent to fetch it without our knowledge. If any wood was now known to have the properties of that used by Moses to sweeten water, the inhabitants of *Sues* would not fail to employ it.

“*Wadi Girondel* is nine or ten German miles from *Sues*, and near to *Dsjebbel Hammam Faroun*. This valley contains many trees, and even small woods. *Aijoun Musa*; or, the *Wells of Moses*, are distant two German miles S. E. 30° S. from *Sues*, and a good half [German] mile from the Gulf of Arabia, in a sandy plain. Water is found in many places on digging a foot deep: but the Arabs report, that of *five wells* seen there, only *one* yields a water fit for drinking.”—So far NIEBUHR. For further accounts of Mount *Sinai*, see on Exod. xxiv. 6. We close with a few remarks, by way of notes.

1. *Tor*. This name is the same as that of the famous city of *Tyre*, on the Mediterranean. The circumstance of finding a second *Tyre*, and on the Red Sea, deserves notice, as being a very convenient situation for carrying on the trade to India. In fact, this city was built by the Tyrians, of which Strabo gives the history. The reader will form his own opinion on this; but, if the Tyrians traded from hence to India, it favours the idea that the neighbouring ports of *Eloth* and *Ezion-gaber* might trace the same track. *Vide OPHIR*.

2. *Ezion-gaber*. The chief remark on this place is included in the former note. Mr. BRUCE tells us, that the entrance of its port is dangerous, by reason of rocks which may easily be mistaken for the opening of the harbour.

3. This *payment for water* explains Numb. xx. 19; and we cannot but observe, throughout these extracts, the anxiety which is attached to the supply of water, and to its good qualities. The rarity of good water accounts for this.

4. The circumstance of water being found only *occasionally* in the torrents, and the valleys, together with the distress of those who, expecting to find it, are disappointed, is finely expressed by Job, chap. vi. 15.

My brethren have dealt deceitfully as a brook,
As the streams of brooks they pass away,
'Ere they wax warm, they vanish;
'Ere it is hot they are consumed out of their place.
The troops of Tema looked;
The companies of Sheba waited for them;
They were confounded to the same degree as they had hoped;
They came thither, and were *completely* ashamed.

Our English ideas of *brooks*, and *streams of brooks*, are very feeble, compared with those of the Arabs in respect to their *wadi*, torrents; nor can we conceive the distress of a caravan from a remote kingdom, when, after travelling during a sultry day, or days, it comes to a place where the finding of water was depended on, but in vain!

5. In the EXPOSITORY INDEX, p. 42, on the article MANNA, Exod. xvi. the reader will observe that a doubt is suggested, whether the whole of the camp of Israel lived on the manna; such information as that contained in the present

present article, leads to the conclusion that they had, or might have, other food; since the fruits, or productions of this region, are described as being plentiful, and capable of maintaining "thousands of people" in their present state. That this district of Arabia was more fruitful formerly, than it is at present, we have elsewhere supposed. May we presume to think, that when mortals, weak though they be, use proper means to accomplish what laudable purposes they undertake, they may hope for the divine blessing *in addition?*—possibly, such an allusion is included in those words of our Lord's prayer, "Give us this day our daily bread," *ἐπιβίωτος, panem supersubstantialem*,—*in addition* to what had been already procured.

6. *The Schiech's wife managed a garden of date trees.* Precisely according to the remark of the Bride, in *Solomon's Song*, chap. i. 6.

The sons of my mother treated me contemptuously:
They appointed me Inspectress of the fruiteries.

7. It should seem by this passage, that NIEBUHR was some hours in descending from the *Mount of Moses* to its real base; consequently the distance was considerable; this coincides with a remark on *Mount Sinai*, on *Exod. xxiv. p. 6.*

8. *Characters coarsely engraven, apparently with some pointed instrument of iron in the rock.* I take for granted that these characters are ancient; whether so ancient as the days of Job, cannot be affirmed; but, this seems to be an instance agreeable to the desire of that patriarch, chap. xix. 23, 24.

O! that my words were now written!
O! that they were firmly cut in a book!
By an iron pen upon lead—the leaden leaves of a book;
— In a lasting rock cut deeply.

That Job had the thought of *perpetuity* attending such incisions in the live rock, is evident; and with the utmost propriety: as NIEBUHR's account demonstrates.

9. When the waters are gone off the valley it is *soon covered with grass.* No doubt it was the same in the valley of *Paran*, and around where Israel encamped; this assists in accounting for the means whereby the cattle of the camp were fed—for *they*, surely, did not subsist on the manna.

10. Of the same nature as these roving tribes of independent Arabs, no doubt, was the *Amelek* which attacked Israel, which Joshua discomfited, and which Saul exterminated. *Exod. xvii. 8, 14. 1 Sam. xv. 3, 18.*

11. The stress laid by NIEBUHR on the beauty of the springs on *Mount Sinai*, on the goodness of their water, and their abundant supply, deserves especial consideration. Was Moses acquainted with these springs, and their excellence? It might be thought so: and that he did not mean to bring his caravan to a spot where no water was procurable, to quench their thirst. In short, he led them to where the best in quality, and the most in quantity,
which

which this region afforded, was to be found; and when, owing perhaps to an increased demand for it, it proved insufficient, *then* the divine goodness opened a breach in the rock, which, could it be distinguished, runs most probably (like the fountain of Sampson) unto this day.

Observe, moreover, that NIEBUHR says, the springs do not form streams of a permanent description. It may, nevertheless, be conjectured, that Moses was acquainted with some that did run constantly; though, perhaps, when they reached the sands they were absorbed by them; for he seems, Deut. xxxiii. 3. to distinguish the Waters of Strife, *Meribah Kadesh*, from the water of *Ashdoth*, the *copious, flowing* (and, one should think *permanent*) springs. Vide on Mount Sinai, Exod. xxiv. p. 8, *ad fin.* Should any person hereafter have an opportunity of searching for these springs, perhaps they may be found in the direction of the evening rays of the sun.

A remark in the book of Numbers, hints at the very great extent indispensably requisite to the camp of Israel: it may be further remarked, that not only was this space necessary, when the camp was stationed at *Sinai*, but also, in other places where it was stationed during its march, in order that the signals from the center might be seen throughout it.

NIEBUHR says *he did not go to the west of Sinai*; probably, therefore, his map is, in these parts, drawn from an estimate by his eye; the same apparently, is true of the southern parts of his map. If Dr. SHAW had been his equal in the art of Design, more confidence might have been put in *his* map than can be, at present. We have, however, traced Dr. SHAW's route on the map of NIEBUHR; which, from *Sues* to *Elim*, seems to have been precisely that of the ancient Israelites. In fact, the mountains seem to determine the track, decidedly; but, at *Elim*, the reader will observe *two* courses to *Sinai*: one leading N. E. as direct as possible to the Greek convent; the other to the south of Mount *Sinai*. Dr. SHAW seems in his map to have marked the latter, while his narrative agrees only with the former. If there be any passable way to the south, it were very desirable that it should be inspected; as possibly it may have been the scene of interesting events.

It will be observed, that we have added those Scripture names which appear to be ascertained by Dr. SHAW; and in this respect, we have preferred his opinion to that of NIEBUHR.

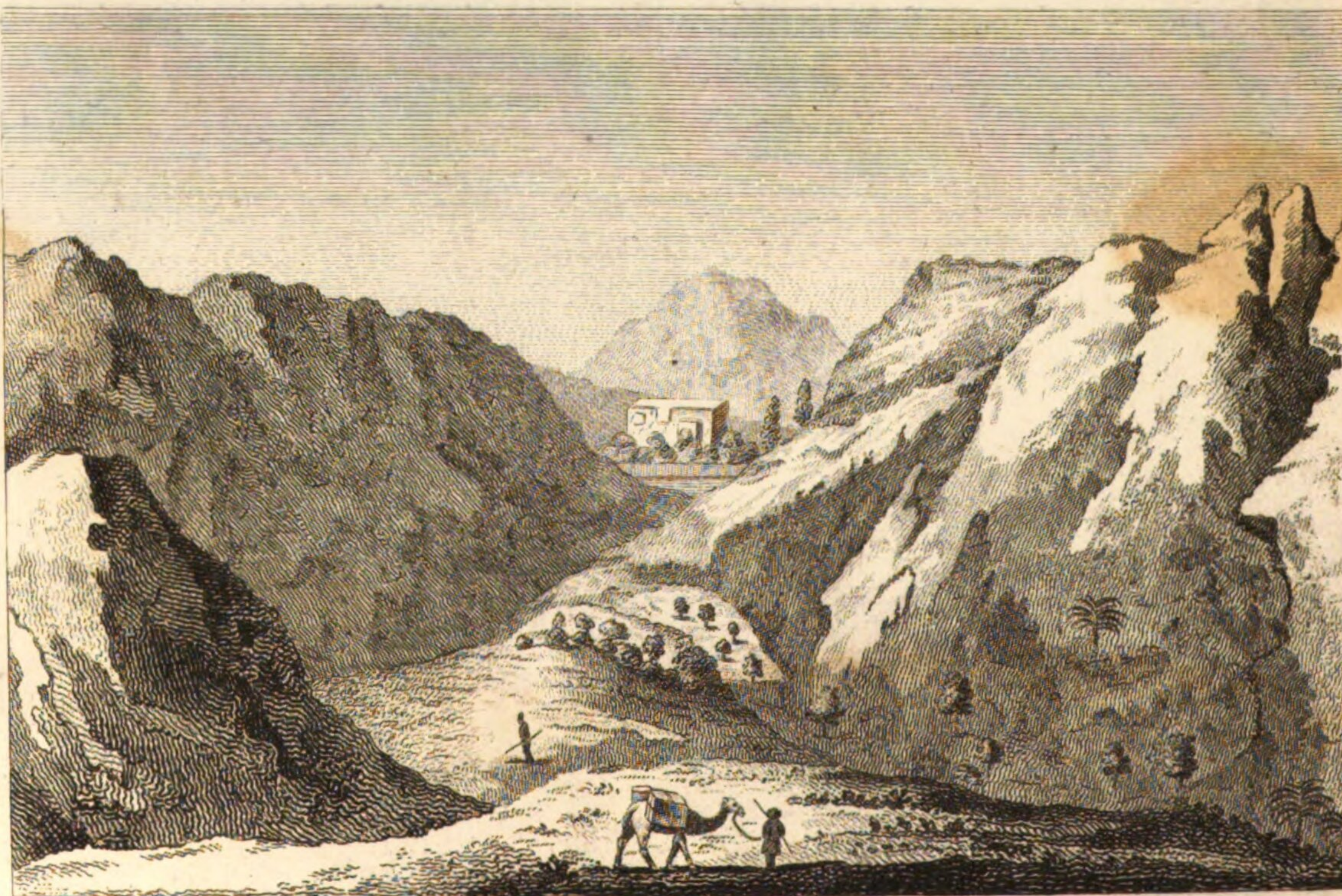
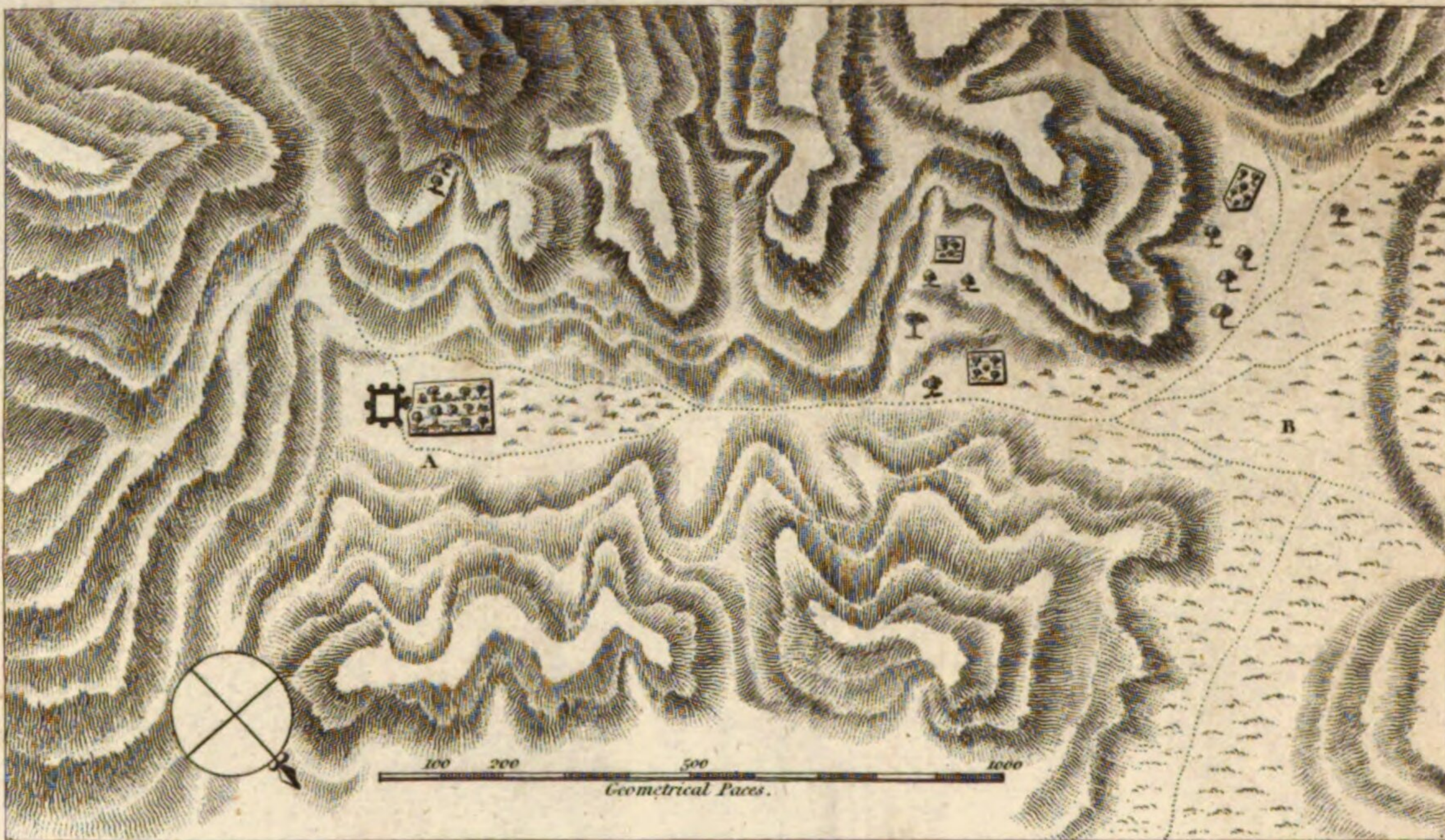
On the whole, we hope this MAP will communicate information of a desirable kind to the reader; and contribute to render the route of the Israelites to Mount Sinai better understood by those who wish to obtain a competent acquaintance with this part of their Bibles. The addition of the view of Mount Sinai from *Tôr*, not only shews how that mountain appears when seen from the Red Sea, but enables us to judge of the distance to which that mountain commands a prospect.



SINAI.



SHAN.



SINAI. Plate II.

OF UNCLEAN BIRDS.

LEVITICUS, CHAP. XI. VERSES 13, 14, 15.

When considering in its place the passage before us, which refers to birds unclean by nature, we divided them, according to the presumed intention of the sacred writer, into THREE distinctions: 1. Those of the LAND. 2. Those of the AIR. 3. Those of the WATER. This distribution appears to be founded in reason and propriety. [Vide EXPOSITIONARY INDEX.]

EXPLANATION OF THE PLATE OF UNCLEAN LAND-BIRDS.

No. 1. The ostrich. This bird has been the subject of many inquiries, [Fragment, No. cxlv. p. 91]; and we have no hesitation in deeming that it may be substituted for the ass, wherever the "daughter of screams" is mentioned by the sacred writers. That this is a bird of the desert, a bird in some respects inconsiderate and stupid, is well known.

No. 2. The Night-Owl, or SCREECH-OWL. We are not without difficulty in determining this bird, which is the second marked by the Hebrew writer. It is usually understood to be a night bird; there are, therefore, few birds to which it can be referred; the Goat-sucker, or Night-Swallow, might be thought of; but the story of its sucking goats is a fable; and we want a voracious land bird, by consent of all nations and all writers. The genus of owls is sufficiently numerous, important, and generally distributed, to render it very likely to be noticed on a legislative occasion like the present; and on the whole, an owl of some kind may safely be taken for the bird designed by the sacred writer. We presume, therefore, that our figure of the Screech-Owl may be accepted as a fair representative of the genus.

No. 3. The Rhaad, or Sah-sah, from Dr. Shaw. We have nothing to add to the extract given in loc. from the Doctor, but a wish for more satisfactory information on the subject of this bird.

No. 4. The ABOR-HANNIA of BARRIS, which he supposed to be the ancient Hen of Egypt. Many circumstances seem to support this opinion, and we suppose that in its large nest, as a little in England, it might be in Egypt. For ancient Egyptian notions of the Hen, see the plates, vide plate to Fragment, No. cxv. p. 43.



OF UNCLEAN BIRDS.

LEVITICUS, CHAP. XI. VER. 13, &c.

When considering in its place the passage before us, which refers to birds unclean by nature, we divided them, according to the presumed intention of the sacred writer, into THREE distinctions: 1. Those of the LAND. 2. Those of the AIR. 3. Those of the WATER. This distribution appears to be founded in reason and propriety. [*Vide EXPOSITORY INDEX.*]

EXPLANATION OF THE PLATE OF UNCLEAN LAND BIRDS.

No. 1. The OSTRICH. This bird has been the subject of our inquiries, [Fragment, No. cxliv. p. 93]; and we have no hesitation in desiring that it may be substituted for the *owl*, wherever the "daughter of screams" is mentioned by the sacred writers. That this is a bird of the desert, a bird in some respects inconsiderate and stupid, is well known.

No. 2. The *Night-Owl*, or SCREECH-OWL. We are not without difficulty in determining this bird, which is the second marked by the Hebrew writer. It is usually understood to be a *night* bird; there are, therefore, few birds to which it can be referred; the *Goat-sucker*, or *Night-Swallow*, might be thought of; but the story of its sucking goats is a fable; and we want a voracious land bird, by consent of all versions and interpreters. The genus of owls is sufficiently numerous, important, and generally distributed, to render it very likely to be noticed on a legislative occasion like the present; and on the whole, an owl of some kind may safely be taken for the bird designed by the sacred writer. We presume, therefore, that our figure of the *Screech-Owl* may be accepted as a fair representative of the genus.

No. 3. The *Rhaad*, or *Saf-saf*, from Dr. SHAW. We have nothing to add to the extract given *in loc.* from the Doctor, but a wish for more satisfactory information on the subject of this bird.

No. 4. The *ABOU-HANNES* of BRUCE, which he supposes to be the ancient *Ibis* of Egypt. Many circumstances concur to support this opinion; and we suppose that its plumage may differ a little in Ethiopia from what it might be in Egypt. For ancient representations of the *Ibis* from Egyptian pictures, *vide* plate to Fragment, No. cxxvii. p. 45.

EXPLANATION OF THE PLATE OF UNCLEAN AIR BIRDS.

No. 1. The EAGLE. This is usually placed first by naturalists in the order of rapacious birds. The Eagle possesses immense powers of flight, and strength of limbs. It has a strong hooked bill, the base of it covered by a *cere*, or naked skin. The Golden Eagle, which is the kind given in our print, weighs about twelve pounds; is in length three feet; extent of wings seven feet four inches; bill three inches long, of a deep blue colour; *cere* yellow; irides hazel; sight and smell very acute, *her eyes behold afar off*, as is remarked, Job. xxxix. 27. in which passage the natural history of the eagle is finely drawn up.

Is it at thy voice the Eagle rises?

And therefore maketh he his nest on high?

The rock he inhabits;

And he abides on the crag of the rock, and on the place of strength:

From hence he pounces on the prey;

His eyes inspect afar off;

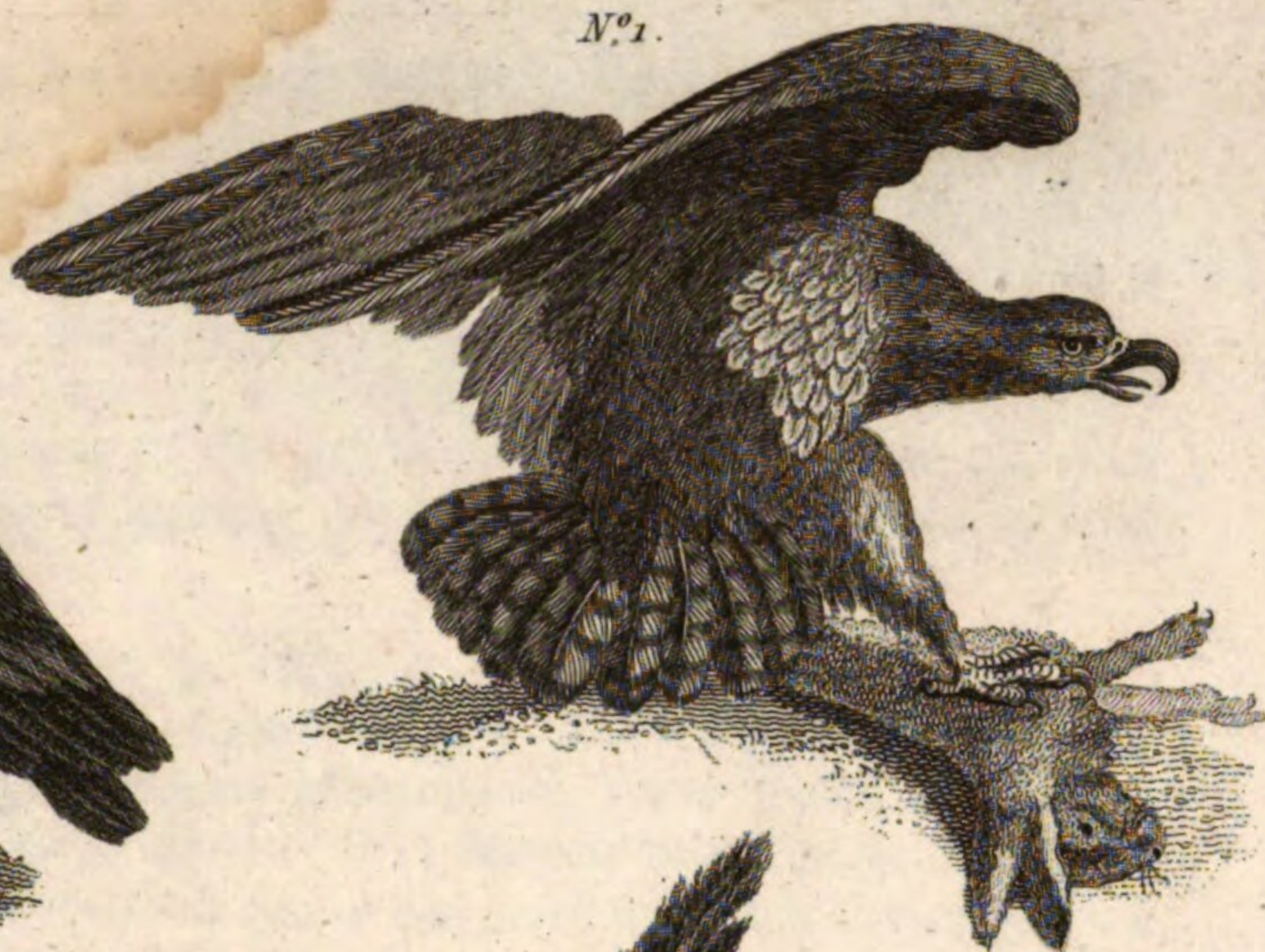
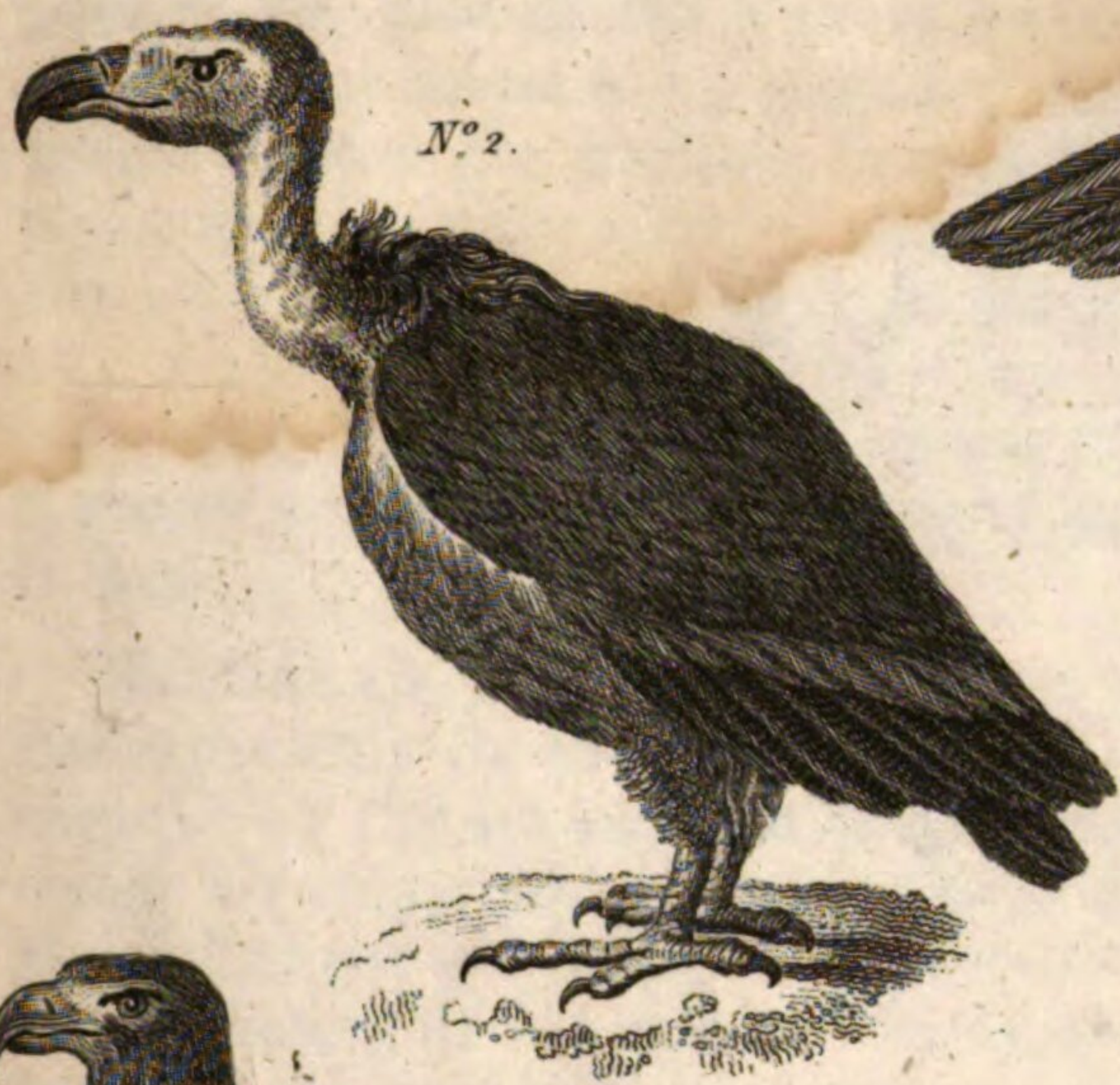
Even his young suck down blood;

And wherever is slaughter there is he.

This description almost supersedes the necessity of further information. Eagles are very destructive to fawns, lambs, kids, and all kinds of game, particularly in their breeding season. It is unsafe to leave infants in places frequented by these birds, there being instances of eagles carrying them away. It is a long-lived bird; KEYSER mentions an eagle which had lived in confinement at *Vienna*, 104 years; but when the Psalmist says, "thy youth is renewed like the eagle's," he probably refers to the revival experienced by this bird after moulting its feathers. There are many kinds of eagles: We presume this very name *Nisser* includes several.

No. 2. The VULTURE. It will be seen *in loc.* that there is some hesitation in taking the second bird of the Hebrew writer's list for the *Vulture*. The usual idea of the Hebrew name *peres* is that of *breaking, separating into bits*; and beside what is said of the *Ossifrage*, or *bone-breaker*—of its prey, we are informed, that "the Osprey, or bone-breaker, '*procellaria maxima*,' has a very remarkable beak, which appears as if it was fractured, or composed of several pieces like joints: I suppose it to be a bird of prey, as we found the legs, wings, and other parts of small birds in its stomach." *Cox's Voyage to the South Sea*, p. 9. It was but fair to insert this remark, because this conformation of its beak seems to strengthen the propriety of its name; and if this be adopted, we must then say the *Vulture* is included among the eagles of the former number: which seems indeed plausible from the expression of Micah, i. 16. "*Enlarge thy baldness as the Eagle*," [*Nesher*], if the naked-
ness





ness of the neck of the Vulture be here referred to. Against this it may be replied, that *baldness* is a privation of hair from the *pate*, or upper part of the head; whereas the Vulture, though bare of feathers, is not absolutely without a downy kind of covering; and that his *neck* is bare, not his *head*, which is the proper seat of *baldness*. As the prophet directs to a token of mourning, to have made his *neck* bare like that of a vulture would not have answered his idea. Moreover, in justification of the prophet we should inquire whether a proper *baldness* may not be found among genuine eagles; and this indeed is fact.

Mr. BRUCE, in his *Travels*, vol. v. p. 155, describes an eagle, known in Ethiopia only by the name *Nisser*,—eagle; but by him called “the golden eagle;” by the vulgar *abou duch’n*, father long-beard, from the tuft of hair under his chin. He is a very large bird. “A forked brush of strong hair, divided at the point into two, proceeded from the cavity of his lower jaw at the beginning of his throat. He had the smallest eye I ever remember to have seen in a large bird, the aperture being scarcely half an inch. *The crown of his head was bare or bald, so was the front where the bill and skull joined.*” This then is the “Eagle” of the prophet, who advises to extend the baldness of mourning over the whole head, as this bird’s baldness occupies not only the crown of his head, but his forehead also.

It may be said likewise, that the habits of the Vulture answer the import of the name *peres*, as some vultures carry away pieces of flesh from the carcase of a large animal to separate places, and there they devour them in security. All the eastern versions render this word in allusion to *strength of body*, or *strength of claws*, or *rapacity*. These ideas coincide perfectly with the Vulture; it is even probable that this class yields birds, in size and rapacity superior to eagles; witness the *Condor* of America, said to stretch eighteen feet. We can learn nothing from the versions. Oneklos renders, *naked*, which leads to the Vulture at once, and is supported by the LXX. and Vulgate. The Vulture is, by the modern Arabs, called *Nesser*; in Africa it builds in high rocks, on lofty precipices; in dreary parts of the mountains of Atlas, &c.

We may consider as certain, 1. That the *Vulture* could not be unknown in the countries where Moses wrote. 2. That it was likely to form a *distinct* class of birds, though reckoned among eagles. 3. That modern naturalists are often at a loss whether to place some subjects among the eagles, or among the vultures. *Vide* LATHAM’S *Synopsis*, vol. i.

No. 3. The figure of that Eagle which BRUCE calls *Nisser Tokoor*, but of whose manners he gives no history. This we insert merely on the conjecture, that as the Vulture was distinguished among eagles by its deficiency of feathers (on the neck), so the *atzniah* of this passage *might* be distinguished by superfluity of feathers (on the head). Beside this bird, whose tuft is on the back of his head, the *Nisser* of BRUCE has a beard under his chin; and we know another, often called “the bearded vulture;” which having feathers
on

on the neck is as often classed among eagles. Might this peculiarity form these birds into a class opposed to that of the Vulture?

No. 4. The OSPREY, or SEA-EAGLE, copied from BUFFON; who says, it differs from other eagles, 1. By the colour and shape of its claws, which are (exceedingly large and strong, *Pennant*) of a shining black, and form a perfect semicircle. 2. By the legs, which are naked in the lower parts, and covered with small scales of a bright yellow colour. 3. By a beard of feathers under his chin, which has procured him the name of "the bearded eagle." But PENNANT says, "underneath his bill grow several short, but strong hairs, or bristles, forming a sort of beard;" and this seems to be more correctly descriptive of this bird, which is ill entitled to the name of "bearded eagle" (though he seems to introduce those thus distinguished), when others have this appendage so much larger. In fact, this *beard* is not shewn, either in the figure of BUFFON, or in that of PENNANT. This bird, in extent of wings, is nine or ten feet; it feeds principally on fish, by darting itself down on them. MARTIN, speaking of the great eagles in the Western Isles, says, they fasten their talons in the back of the fish, commonly of salmon, which are often above water, or on the surface. Those of Greenland will even take a young seal out of the water. This Eagle preys also on water-fowl, and on game of most kinds. It always builds near water, either the sea or inland lakes, where it finds prey.

We are now able to appreciate another reason for the order we have adopted, and the propriety of rendering the second eagle, *Vulture*; for if we note the food which is principally selected by each bird, we find the first, the Eagle, feeds on *living* game of all kinds; *i. e.* it catches them while *living*, and *kills them itself*: so that it may be correctly said of this bird, which carries *living* prey to its nest, "its young ones suck down blood,"—fresh blood from the expiring subject. On the contrary, this cannot be said of the *Vulture*, which forms the second class of eagles, for this feeds on *dead* prey,—prey *dead* before the bird attacks it; nay even *putrid* food; for LATHAM says, "Of this circumstance *I am clear*, from the *carrion Vultures of Jamaica*, two of which I kept for some time. They would indeed eat any raw flesh, but expressed a particular happiness when any tainted food was offered them; fluttering with expanded wings without ceasing, and falling on with double the appearance of appetite, as well as devouring twice the quantity as at other times. Vol. i. p. 3. The third class of eagles feeds on *fish*; so that we have in the permanent distinctions of Nature an authority in support of our order, which is independent of the meaning of names, and the rendering of translators, while it is perfectly coincident with the opinions of those who appear to have most correctly understood the subject.

No. 5. The HAWK, or Hebrew SWIFT. We have given the figure of the *Rough-legged Falcon* from PENNANT.

As we suppose that this name includes the whole *genus*, we have rather chosen this, which is a wandering hawk, than one more stationary, or fixed, in a country.

There is no difficulty in admitting this bird to be the *Hawk*, if the second bird in the list be the *Vulture*.

The *KITE* is regularly placed with the hawk, which it pretty much resembles in figure and manners. It generally breeds in large forests, or wooded, mountainous countries. Its motion in the air distinguishes it from all other birds, being so smooth and even as to be scarcely perceptible; sometimes it remains quite motionless for a considerable space; at others it *glides* through the sky, without the least apparent action of its wings: hence is derived its old name *glede*, i. e. *the glider*. It eats lesser birds, game, offals, &c. Its tail is *forked*. The Kite is in length about twenty-seven inches; breadth five feet.

The versions agree with the *Kite* as the bird intended; the *Chaldee* terms imply *rapaciousness*; the *Syriac*, a bird of *high flight*.

No. 6. The *RAVEN*, *CROW*, &c. are certainly designated by the generic name in the original. They generally build in trees, and are held in some respect for devouring carcases and filth, that would otherwise prove a nuisance. The Raven is a very docile bird, flies in pairs, a great height, making a deep, loud noise. Its scent is remarkably good. It is very long lived. The raven (and crow) *will pick out the eyes of young lambs just dropped*; for which reason it was formerly, in England, called *gor*, or *gorecrow*; and so Ben Johnson says

.... Vulture, Kite,

Raven and *Gorecrow*, all my birds of prey. *Fox*, Act. I. Scene I.

The reader will perceive, in the above description, sufficient reason for associating the Raven and Crow among birds of prey, even with Eagles and Vultures; Solomon has well consorted the Raven with the Eagle, Prov. xxx. 17.

The eye which mocketh its father,
And despiseth to obey its mother,
The Ravens of the valley shall pick it out,
The young Eagles eat it.

The *ROOK* feeds entirely on grain and insects, not on carrion; it is a sociable bird, living in vast flocks. We need not introduce others of this class, as they are well known among us.

EXPLANATION

EXPLANATION OF THE PLATE OF UNCLEAN WATER BIRDS.

No. 1. The GANNET is a large bird, weighing seven pounds; in length three feet; it is remarkable for the quickness of its sight. Beneath the chin is a kind of bag, dilatable, capable of containing five or six entire herrings, which in the breeding season it carries to its nest. It soars to a vast height, then darting headlong into the sea, makes the water foam and spring up with the violence of its descent. The title of *Cataracta*, a name borrowed from Aristotle, admirably expresses the rapid descent of this bird on its prey. Some years ago, a Gannet flying over *Penzance*, seeing some pilchards lying on a fir-plank, it darted down with such violence as to strike its bill through the board (an inch and a quarter thick), and broke its neck. They are sometimes taken at sea by a similar trap. *Linnaeus* classes this bird with the *Pelican*. Among the Rabbins, some have taken the *first* bird in the list of water birds for the *Pelican*. *Bochart* thought the same; but if this bird, though not properly a *Pelican*, yet has so much resemblance as to have influenced *Linnaeus*, both *Bochart* and the Rabbins may stand excused; their opinion, nevertheless, coincides with our own.

No. 2. The CORMORANT is about three feet in length, has a slight kind of pouch under the chin; inhabits the highest cliffs over the sea; is remarkably voracious; has a rank and disagreeable smell, even while alive; its voice is hoarse and croaking: in China it has been trained to fish for its master, to whom it forms a considerable source of profit. The same formerly in England. *Whitelock* tells us, he had a cast of them *manned* like hawks, which would come to hand. This agrees with the versions as to the character of the *second* bird in this list; and being, like the former, a sea bird, seems to follow it with propriety.

No. 3. The smaller Heron, or rather a kind of Bittern, the "little Bittern" of PENNANT, The reader sees *in loc.* the account of this bird given by *Hasselquist*. Our figure is copied from Dr. *Russell* (*Aleppo*. vol. ii. p. 200), who observes, that "it is not represented in its proper attitude; for the bird, when alive, stands with his body perfectly *erect*, as well as his head and neck." This singular attitude is hinted as by the sketch, No. 4. The length of the bird is about fifteen inches. It is common near Aleppo. The history of this bird in PENNANT informs us, that it is a very retired bird, concealing itself in the midst of reeds and rushes in marshy places. It is slow of flight. It has two kinds of notes; one croaking, when it is disturbed; the other bel-
lowing, which it commences in spring and ends in autumn. Mr. *Willoughby* says, that in autumn it soars into the air with a spiral ascent, making, at the same time, a singular noise. The ancients mention three kinds of heron:
1. *Leucon*, the white Heron. 2. *Pelles*, supposed to be the common sort.
3. *Asterias*, the starry, the Bittern, supposed to derive this name from
sometimes



... in length ... Beneath the chin ... of six or seven herons ... it rises to a vast height ... and springs up with ... a name borrowed from ... of this bird on its prey ... some ... and broke its neck. They are some- ... this bird with the ... have taken the first bird in the list of ... thought the same; but if the bird, ... much resemblance as to have ... the Babins may stand excused; their

... three feet in length, has a slight ... highest cliffs over the sea; is remarkable ... even while alive; as you ... to fish for its master, so ... The same formerly in Eng- ... manned like boats, which ... the versions as to the ... of the former, a sea bird, seems to

The smaller Heron, or rather a kind of Bittern, the "Little Bittern" ... the account of this bird given by ... Our figure is copied from Dr. Boissac (Ziippo. vol. ii. p. 200), who ... that "it is not represented as a larger species, for the bird, when ... as well as his head and neck." ... 4. The length of the ... It is common near Aleppo. The history of this ... that it is a very retired bird, concealing itself ... and rushes in marshy places. It is slow of flight. It ... one croaking, when it is disturbed; the other bel- ... and ends in autumn. Mr. ... with a spiral ascent, making, at the ... The ancients mention three kinds of heron: ... 2. Pelles, supposed to be the common sort ... the Bittern, supposed to derive this name from

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UNCLEAN WATER-BIRDS.

piring, as it were, to reach the stars, though at other times meriting the epithet *onos*, lazy. The noises made by this bird seem to correspond with its Hebrew appellation; to which perhaps they gave occasion.

The GOOSE should be the next article; but, 1. It is still dubious whether this be the bird intended. 2. The bird is too well known to need a figure.

No. 5. The PELICAN. I believe there is no great hesitation in considering this bird as that really intended by the Hebrew writer. This bird, when of full age, is greatly superior in size to the Swan; will weigh twenty-five pounds, and extend fifteen feet. The upper mandible is flat and broad, hooked at the end; the lower mandible has appended to it a very dilatable bag, reaching eight or nine inches down the neck: of these bags some are capable of containing many quarts of water. It is common in warm countries; on the coasts of the Mediterranean, &c. The female makes a nest of grass in *mossy, turfy* places, in the islands of rivers or lakes, far from man. Its food is fish, which it takes by diving. When, hovering over the water, it sees a fish, it dives instantly, and seldom fails of catching it, in which the enormous gape of its bill greatly assists. When it has filled its pouch, it flies to some convenient point of a rock, and swallows the fish at leisure. It sometimes fishes in company with Cormorants and Gulls. The notion of the Pelican's feeding her young with blood from her breast, has arisen from seeing it discharge the pouch of water, or fish, for their nourishment.

No. 6. Shews the bag distended. This bird is used for domestic fishing, like the Cormorant.

No. 7. The KINGFISHER. This bird is inserted, merely to shew how aptly he would fill the station, and answer the description, of a bird here wanted. He is therefore, to be considered as *conjectural* only. The reader sees his general description and manners, *in loc.*

No. 8. Is the ROLLER of Europe, or *Shagarag* of Dr. SHAW. This species is diversified, and spread in Africa. Mr. BRUCE gives another *Shagarag*, which he calls *Sheregrig*, marked by an appendage of two long tail feathers. Being of opinion, that the description given of the *Shagarag* is very applicable to the *Kingfisher*, while the stories of the affection, &c. of the *Kingfisher* are allied to the character of the *Racham* of Scripture, I cannot help suspecting, that a bird of the Kingfisher kind, in some of its varieties, is the subject intended, rather than the *Shagarag*.

No. 9. The STORK, is the size of a Turkey, or larger; length three feet three inches; bill seven inches three quarters, colour of it a fine red; plumage mostly white. It is a bird of passage; moving southward in autumn, to winter in Egypt. Is very rare in England; but in Holland they every where build on the tops of houses, where boxes are made to receive their nests. In Persia, at the ruins of Persepolis, the remains of the pillars serve them to build

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LEVITICUS, CHAP. XI. VER. 13, &c.

build on, "every pillar having a nest of them," says Fryer, *Trav.* p. 251. They are common at Aleppo. Dr. Shaw saw three flights of them leaving Egypt, passing over Mount Carmel, towards the north-east, in the middle of April, each flight half a mile in breadth, and they were three hours in passing over. They eat fish, frogs, snakes, and various reptiles; hence the veneration they have enjoyed, as freeing mankind from such pests and vermin. The Hebrew word *chasidah* has generally been understood to signify the Stork; the meaning of the word is to *swell*, and it is taken metaphorically for *swelling* beneficence. We have ventured, however, in Fragment No. cclxxxv. p. 186. to query, whether it might not be derived from an attitude assumed by the bird—a *swelling* attitude. Passing this, we remark that the Stork may stand in this list as the representative of the whole genus, including the Heron and its varieties.

The strongest argument against the Stork as the *chasidah* of the Hebrew text is used by *Michaelis*, who thought the Stork did not roost, or dwell in trees; yet the Psalmist says, civ. 17. "the *fir-trees* are the house of the *chasidah*." To this it is answered, that Doubdan mentions "the resting (*i. e.* roosting) of Storks on trees, between Cana and Nazareth:" and Dr. Shaw says expressly, "The Storks breed plentifully in Barbary; the *fir-trees*, and other trees likewise, when those are wanting, are a dwelling for the stork, Psalm civ. 17." It is therefore probable, that the Stork conforms its manners to circumstances; that, wherever it obtains rest, security, and *accommodation*, there it resides, whether in a ruin, or a tree; but in countries not so populously inhabited as Holland, or most parts of Europe, the tall trees may be most convenient for it. *Alkazuin*, an Arabian writer, remarks, "that it always makes its nest on some elevated spot, whether it be a tall building or a tree." *Heldelinus* assures us, that "it builds on the tops of houses, or on dry trees, which, however, is rare." *Olympiodorus*, on Job, asserts the same. So that, on the whole, we need not hesitate, on account of the infrequency of the Storks of Europe inhabiting trees, to admit, nevertheless, that the Stork may be the *chasidah* of the Hebrew text.

No. 10. The *Boo-onk* of Dr. SHAW. This bird is given only by way of conjecture; what may be said of it appears *in loc.*

No. 11. The *HOOPOE*. This bird is thought to be pretty well ascertained; nevertheless we may conjecture, that a bird which frequents water more than the Hoopoes of Europe do, would not be misplaced at the close of this list.

I cannot help remarking, how accurately the sacred writer has treated this part of his subject; an accuracy which will some time or other, lead to satisfactory certainty in determining the birds he enumerates. All these birds being fish-eaters, afford no distinction arising from their diversities of food; but, the Hebrew naturalist begins with those which inhabit the sea and its rocky cliffs: the GANNET (or Sea Pelican, so to term it), and the CORMORANT; then he proceeds

proceeds to the marsh birds, the BITTERN; then to the river and lake birds, the PELICAN; the KINGFISHER, or the *Shagarag*; then the STORK, which is a bird of passage, and lives on land as well as on water, and feeds on frogs and insects as well as on fish; then to another, which probably is a bird of passage also, because the last on the list, the HOOPOE, is certainly of passage, feeds less on fish than any of the former kinds, and has indeed no great relation to the water. It may, however, be said, that the last *two* on the list are not intended to be merely water birds, but are of kinds prohibited for other reasons: as the BAT, which concludes the list, clearly is.

On the whole, it may be thought, that whether we have, or not, identified every bird in his catalogue, yet we have traced the system of the writer; and have opened the way for judicious observation to identify them; *that* can only be satisfactorily accomplished in the countries to which these regulations are suited. We have marked in small capitals those birds which apparently may be depended on.

In addition to the Plates already given of "Unclean Birds," it may be satisfactory to add representations of some particulars which have been incidentally mentioned in the foregoing discourse; these are offered in the plate subjoined.

No. 1. Head of the *Nisser*, which BRUCE distinguishes as the "Golden Eagle:" he describes him as "surely one of the largest birds that flies. From wing to wing eight feet four inches. From the tip of his tail to the point of his beak, when dead, four feet seven inches. Weighed twenty-two pounds." His *baldness* is the reason of our introducing him; it has already been described in the words of Mr. BRUCE, and is very apparent in the print.

No. 2. The *Bearded Vulture* of the Alps, from COXE's Travels in Switzerland. Mr. COXE informs us, that this is from a female bird, which measured seven feet from the tip of the beak to the extremity of the tail; eight feet six inches its expanded wings. "This bird, though always called a *Vulture*, yet differs from that genus, and is referable to the *Eagle*, in having the head and neck covered with feathers. It inhabits the Alps, makes its nest in clefts of rocks, inaccessible to man, usually produces three young ones, sometimes four. Lives on animals which inhabit the Alps, the chamois, white hare, marmots, snow-hens, kids, and particularly lambs, from which circumstance it is called the *lamb Vulture*. Report says, it sometimes attacks man, and carries off children."

No. 3. The *Sea-Eagle*, or *Osprey*, from PENNANT, shewing that no beard, deserving the name of beard, is attached to its beak, or chin.

No. 4. The talons of the *Osprey*, shewing their curvature and strength.

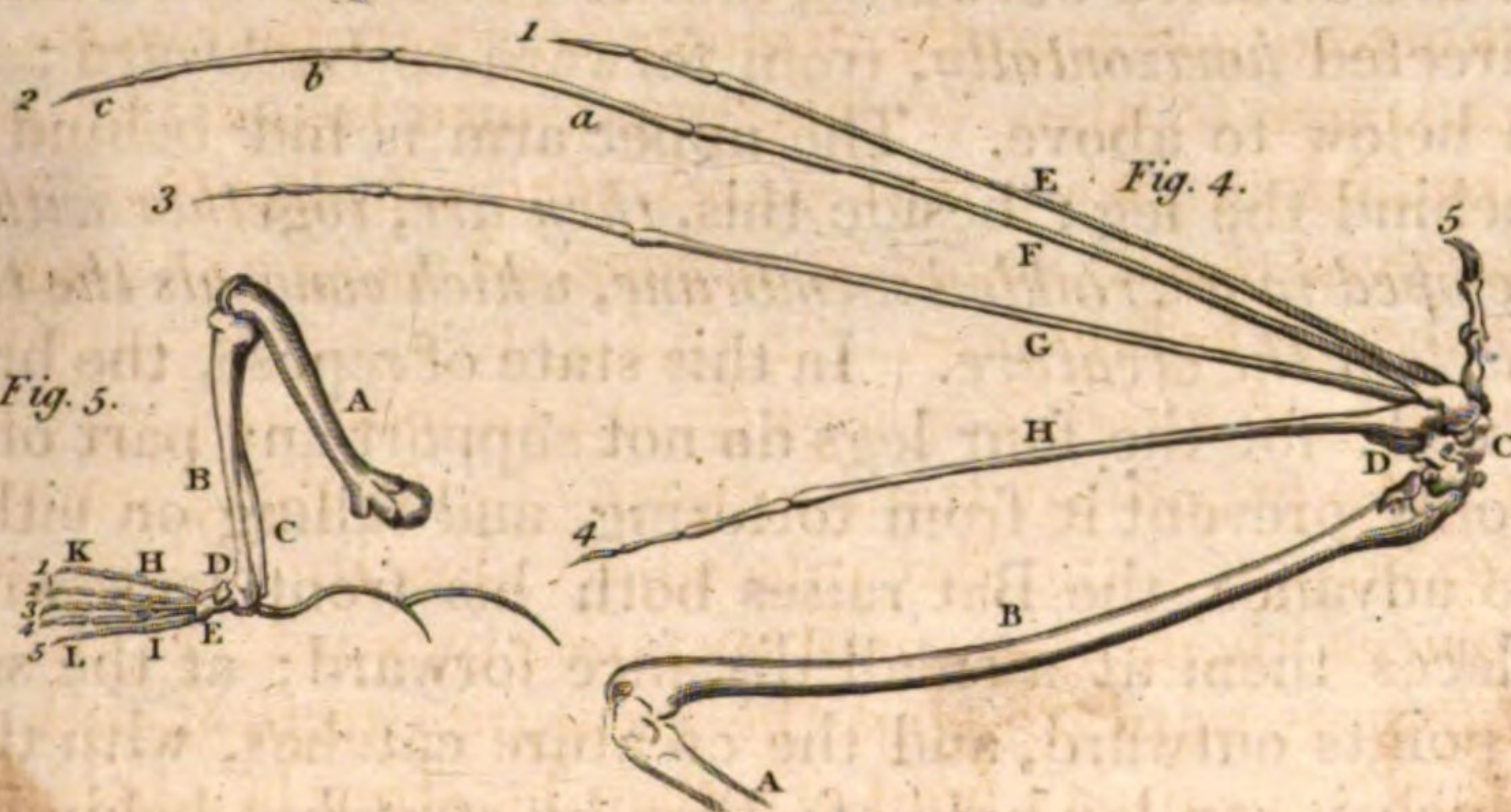
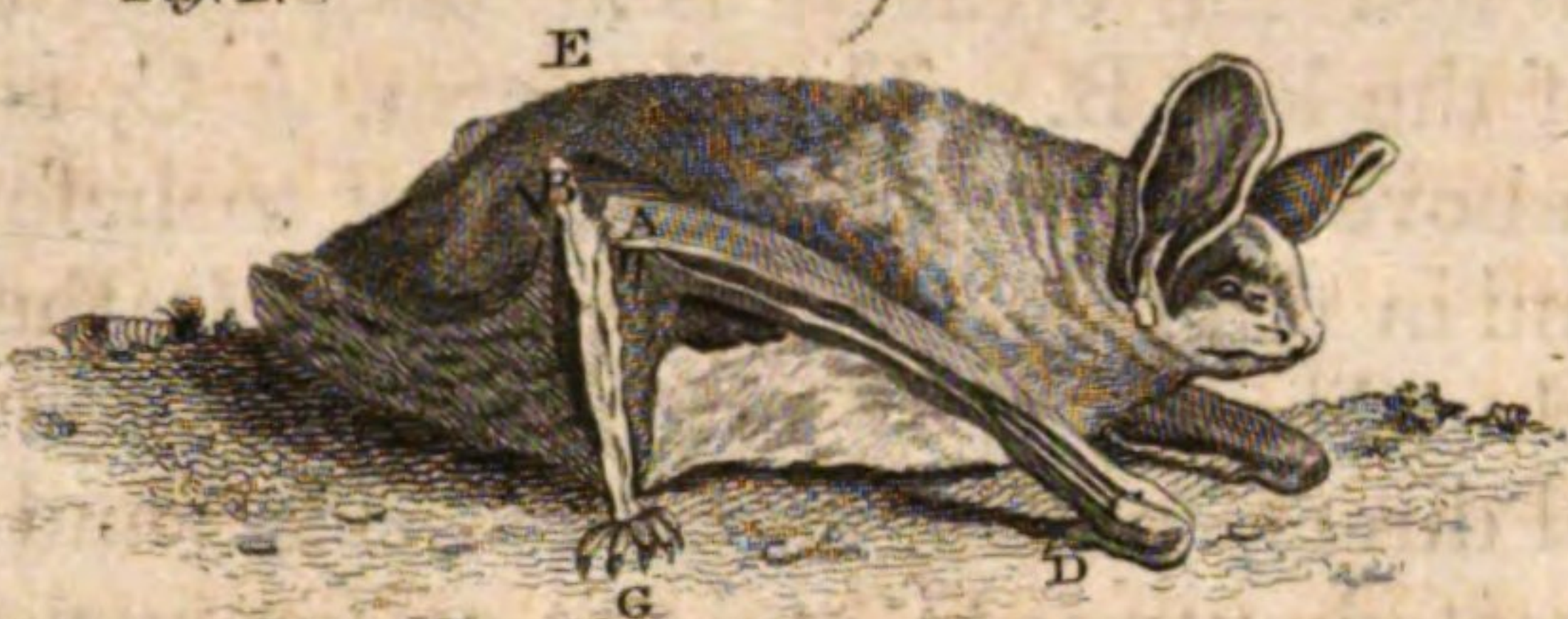
No. 5. The *Racham* of Egypt, as delineated by Norden. This figure agrees well with the account of Hasselquist, who says, "this bird has the most hideou

hideous figure which can be imagined; the face shinny and wrinkled, eyes large and black, beak black and crooked, and the whole body covered with impurities. His aspect inspires I know not what of horror. It eats carrion: mingles among the dogs; does not fly high; is never seen among the lakes," &c. On the contrary, BRUCE has given a figure (No. 6) which is of a much cleaner appearance than the description of Hasselquist would lead us to expect. "It is called by Europeans *Pharaoh's Hen*; in Egypt, and all over Barbary, *Rachamah*. This bird has been mistaken nearly by all the interpreters, Hebrews, Syrians, and Samaritans, and especially the Greeks. The point of the beak of this bird is black, very sharp and strong, for about three quarters of an inch; it is then covered by a yellow, fleshy, wrinkled membrane, as likewise is the fore part of the head and throat. The body is white. The large feathers of its wing all black. It has three toes before, one behind. It has no voice that ever I heard, generally goes single, and oftener sits and walks on the ground than upon trees. It delights in the most putrid and stinking kind of carrion; has itself a very strong smell, and putrifies very speedily!" Mr. BRUCE has some remarks on the Hebrew word *racham*; but if his bird be not the *racham* of Moses, they do not apply to our object.

** Compare with the Mosaic prohibitions, as well of beasts as of birds, those ordained by *Menu*. (*Vide Fragment*, No. cccxlii. p. 82.)

BIRD

N^o 1.N^o 6.N^o 3.N^o 2.N^o 5.N^o 4.



THE BAT.

HAVING considered creatures, legally unclean, as well beasts as birds, we have remaining one, the equivocal properties of which seem to exclude it from both those classes:—it is too much a bird to be properly a beast, too much a beast, to be properly a bird; the BAT, therefore, is extremely well described in Deuteronomy xiv. 18, 19. (as I conceive the passage should be read): “Moreover, the BAT, and every *creeping thing that flieth*, is unclean to you: they shall not be eaten.” This character, which (thus understood) fixes to the BAT, the name used in both passages, is omitted in Leviticus: nevertheless, it is very descriptive; and places this creature at the head of a class, of which he is a very clear, and a very well-known instance.

The genus, BAT, is very numerous: some of them are very violent, very powerful, and very injurious; but without adverting to those of foreign countries, we shall only remark on the conformation common to all; whereby they are enabled to fly; and are in consequence distinguished from quadrupeds, or as Deuteronomy, expresses it, “creeping things.”

LEVITICUS xi. 19.

We

We have already ventured to assert, that the leading rule adopted in characterizing animals as uncertain, was taken from their feet and toes; and this subject adds another support to our principles. To justify this idea, we translate from Buffon the remarks of Mr. Daubenton, on the conformation of the Bat: referring to the figures on our plate.

Fig. 1. "The legs of the Bat appear to be absolutely different from those of other quadrupeds; and, indeed, they are directed, and even formed, in a very particular manner. When the creature is at rest, the *elbow* of the arm A, approaches the *knee* of the leg, B. The fore-arm, A C, is very long, and inclines obliquely from above to below, from behind to before. The wrist, C, rests on the ground; and in the fore-arm only one toe (rather *thumb*) is visible; which stands backward. The knee, B, rises as high as the rump. The hind-leg, B G, has a vertical direction from above to below; and the five toes, G, of the hinder foot are directed outwards, and are of commensurate lengths. The upper arm is directed *horizontally*, from forward to backward; and the thigh *vertically*, from below to above. The upper arm is hid behind the fore-arm, and the thigh behind the leg; beside this, *they are, together with the fore-arm and the leg, enveloped in a wrinkled membrane, which conceals the tail, and almost all the hinder parts of the creature.* In this state of repose, the breast and belly rest on the ground; for the four legs do not support any part of the weight of the body, but only prevent it from tottering, and falling on either side.

"In order to advance, the Bat raises both his front legs with coincident motion, and places them at a small distance forward; at the same time, the thumb of each points outward, and the creature catches, with the claw of it, at any thing which it can lay hold of; then he stretches behind him his two hind-legs, so that the five toes of each foot are also directed backward: he supports himself on the sole of this foot, and secures himself by means of the claws on his toes; then he raises his body on the front legs, and throws himself forward, by folding the upper arm on the fore-arm, which motion is assisted by the extension of the hind-legs, which also push the body forward. This gait, though heavy, because the body falls to the ground at every step, yet is sometimes pretty quick, when the feet can readily meet with good holding-places; but when the claw of the front foot meets with what is loose, the exertion is inefficient. Such is the motion of the Bat when fatigued, or in the day time, when too powerful light prevents him from distinguishing objects accurately; but when the light is suitable to the weakness of his sight, and the temperature of the atmosphere inclines the insects on which he feeds to come abroad, then he displays his capacious wings, launches into the air, and rising and falling, he rapidly traverses considerable distances.

"We have said, that when the Bat is in a state of rest, only the thumb of his front foot is visible; but, in reality, he has also four very long fingers, connected with it, lying along the fore-arm, which are enveloped in a membrane. When the creature takes to flight, he diverges his four long fingers from each other, spreads the membrane between them; and this now answers the purpose of a wing. This membrane is supple, thin semi-transparent, but so strong that it is not to be torn without exertion. Fig.

Fig. 2. Represents the Bat in the act of flying: A, the Arm; B, the fore-arm; C, D, E, F, the fingers. The first finger, C, is near to the second, D; but the second, D, is further from the third, E; and the third, E, is further from the fourth, F; as appears by the increasing intervals of the hollow sweeps, G, H, I. The references, K and L, shew the membrane enveloping the rump and tail: M is the thumb.

Fig. 3. Shews the skeleton of the Bat, in this attitude and action: *a*, the shoulder-blade; *b*, the clavicles; *c*, the arm; *d*, the fore-arm, which, instead of *two* bones, as usual in quadrupeds, has only *one*, answering to the *radius* in other animals; *e*, the system of the hand and fingers, comprising four very long fingers, 1, 2, 3, 4, and one shorter, the thumb, 5.

Fig. 4. In order to render this formation of the front foot more distinct, and more impressive on the mind of the reader, this figure shews the front leg, or arm, at large.—A, the arm; B, the fore-arm; C, D, the carpus: E, F, G, H, the metacarpus; 1, 2, 3, 4, 5, the fingers and thumb, each divided into its phalanges, *a*, *b*, *c*.

Fig. 5. The formation of the hind foot of the Bat:—A, the thigh-bone; B, the tibia; C, the peroneum; D, E, the tarsus; H, I, the metatarsus; K, L, the toes, 1, 2, 3, 4, 5."

This structure of the foot of the Bat, agrees with what we have observed on the other animals considered as unclean; that the evident and most conspicuous mark of unlawfulness was apparent to the meanest capacity, in the structure of the foot; whether it were only *grooved*, but not thoroughly divided, as the camel; apparently divided *externally*, but not correctly internally, as the swine; formed into more divisions than two, as the saphan, which has three toes; into four divisions, as the hare; or into five divisions, as the bat.

We shall offer a remark on the Hebrew name of the Bat, OTHELAPH, (חֶלֶפֶת) which has been usually derived from OTH, (חַפַּץ) to *fly*, and OLAPH, (חֶלֶפֶת) *obscurity, duskiness*:—as if it described the "flyer in duskiness," *i. e.* in the evening. This derivation supposes that *oth* is put for *oith*, which certainly may be so; yet, I think, it might perhaps be deduced from a word spelled without the *i*, *oth*,—to *turn aside*: So we read, 1 Sam. xiv. 32. "The people *turned aside* to the spoil," in our translation, *flew upon*: and the same, chap. xv. 19, "Thou didst *fly upon* the spoil," *i. e.* *turn aside* to seize it; for it is evident, that this was a prevarication, not a direct flight, in a straight line, as it were; but a turning aside, an irregularity. This very word *oth*, in Isaiah xxii. 17. signifies to *hurry* with rapidity—with impetuosity; connecting the notion of irregularity, unsteadiness:—and this gives an idea of the passage very different from that in our version, but perfectly agreeable to the scope of the place.

Behold, the LORD will carry thee away with a mighty captivity;

And will hurry thee off with hurrying:—

Rolling, he will roll thee with revolution:

Like as a ball in a wide ground is rolled by the hand.

There

There shalt thou die; and there shall the—*marecabuth*—chariots of thy glory,
Become the shame of thy Lord's house.

After *querying* whether this passage may contain any allusion to such a game as our game of bowls (of which possibly the subject of the prophecy, Shebna, was fond, and at which he was expert) — I would remark, that the *hurry* introduced into the description of this carrying captive is very expressive and very *à-propos*; that it implies an irregularity of motion, and herein agrees with the former instances of the use of the word *oth*. Now, whoever will take an opportunity of watching the motion of the bat in its flight, will perceive that his progress is extremely hurrying, extremely irregular, and perpetually turning aside: he is not steady, like a bird, in his flight, but leaps, as it were, in flying; and does not prolong any one line of progress, but *zig-zags* about in various obliquities, in flying a hundred yards. In short, he is well described by the provincial appellation of FLITTER-mouse; for he rather *flutters* than flies; and it should seem that this idea of *flittering* was attached by our translators to the word *oth*, when they rendered it by "*flying* upon the spoil."

The word *olaph* is capable of two senses, in both of which it may describe the Bat:—1. To *cover over*, and that *closely*, to wrap up; now we have seen that the bat is very much, if not almost wholly, covered by a membrane, which when extended serves him for wings. It appears by Fig. 2, that this membrane encloses his front legs wholly, his hind legs in a great part, his rump, and his tail: so that from his shoulders to his loins, (proceeding down his back) is the only part of his body not included in this envelope; but especially his fore-legs are wrapped in it. To be sure, this is not so complete a concealment as Tamar employed, Gen. xxxviii. 14. where this word is used: but it may be as complete as the overlaying of the ivory girdle of the bridegroom with sapphires, where also this word occurs.

The second sense of the word *olaph* coincides with our word *velop*, whence *envelop*, *develop*, says PARKHURST; whence, perhaps, a WOLF, which *envelops* himself in some dark dwelling during the day-time, and comes forth to prey in the shades of *evening*. Hence the Latin *vulpes*, a fox, for the like reason.—But is not this also the very description of the Bat, who, during the day-time, conceals himself in his hole, being unable to bear the effulgence of day-light; and only when the enlightened atmosphere is tempered down to a very moderate tone of brilliancy, when

———— Evening grey
Has in her sober livery all things clad,

ventures to *flitter* abroad; concealed, if not secured, by the duskiness of closing day, by the glimmering shades of departing twilight, fading into night. Accordingly, it should be remembered, that several nations have named the Bat from his flying by night: so the LXX. *νυκτερις*, *nukteris*, from *νύξ*, *nux*, night; and the Vulgate, *vespertilio*, from *vesper*, the evening: according to Ovid,

———— *Lucemque perosi,*
Nocte volant, seroque trahunt a vespere nomen.

METAM. lib. iv. 415.



Fig. 1.



Fig. 3.



Fig. 2.

THE MOLE.

OUR Translators have rendered *WEESEL*, the Hebrew word *choled*, in conformity with other versions, and not a few commentators; and they have rendered *MOLE*, the Hebrew word *tinshemet*; from which renderings we have ventured to differ. Having, as we presume to think, established the regularity of the system of the sacred writer, considered in reference to Natural History, we have concluded that the word *tinshemet*, being at the close of a list of lizards, must denote a lizard, like its fellows; and that the Mole is too distant in its nature to be properly introduced in such connection.

But we ought, perhaps, to give some reasons for differing from our worthy Translators, in rendering *Mole* what they have rendered *Weesel*; and this we do, by observing,—1. That the present name of the Mole in the East is *khuld*; which is undeniably the same word as the Hebrew *choled*. 2. That the import of the Hebrew word *choled*, *chold*, or *chuld*, is *to creep into*; and that the same Syriac word implies *to creep underneath*, to creep into by *burrowing*, *i. e.* under ground; and so it is used, 2 Tim. iii. 6. in the Syriac version, “creeping into houses, by going,—*burrowing* under them,” which is the true idea of the Greek, and a very expressive phraseology. It is well known that such is the disposition of

LEVITICUS xii. 29. the

the Mole; a creature formed expressly for the purpose of *burrowing*, and appointed to this mode of life; and not merely, as some creatures are, to *burrowing* above ground, but to *burrowing* under ground. For this purpose it has, as the reader will observe in the figure, a very large, broad, and powerful fore-foot: it is short, thick, and muscular; while the hind-foot, though strong, much more resembles those of other quadrupeds.

The general history of the Mole is as follows:

The Mole is formed to live wholly under the earth, that no place should be left untenanted. Is fat, sleek, and glossy; and, though denied many advantages of other animals, enjoys some of which they are but scantily possessed.

Less than a rat, and bigger than a mouse, with a coat of fine, short, glossy, black hair; its nose long and pointed; its eyes scarcely possible to be discerned. Instead of ears it has only holes. Its neck is short; body thick and round; small short tail; legs also very short; as it rests on its belly, the feet appear growing out of its body. The ancients, and some moderns, thought the animal utterly blind; but Derham, by a microscope, discovered all the parts of an eye. *The fore-legs are very short and strong, furnished with five claws each, turned outwards and backwards; the hind legs are longer and weaker than the fore.*

By the breadth, strength, and shortness of the fore-feet, which incline outwards, *it throws back the earth with ease*; had they been longer, the falling in of the earth would have prevented the quick repetition of their strokes, and they would have required a larger hole for their exertion. The fore-part of the body being thick, and very muscular, gives great strength to the action of the fore-feet, *enabling it to dig its way with amazing force and rapidity.*

Little vision is sufficient for a creature *which lives in darkness*; had the organ been larger, it would have been perpetually liable to injury by falling earth: that inconvenience is avoided by its being very small, and very closely covered with hair.

Buried in the earth, it seldom stirs out, unless forced by violent rains, or when in pursuit of prey it gets into the open air, which is hardly its natural element: *it chooses the looser softer grounds, beneath which he can travel with greater ease*; where also it finds most worms and insects, on which it chiefly preys. It is most active, and casts up most earth, immediately before rain; and, in winter, before a thaw; at those times worms and insects being in motion, and approaching the surface. In dry weather, the Mole seldom forms hillocks, but penetrates deeper after its prey.

The Mole is seldom found, except in cultivated countries.

EXPLANATION OF THE PLATE.

Fig. 1. represents the creature, as it usually appears when out of the earth.

Fig. 2. is the skeleton of its fore-foot; from the *solid*, short, and powerful construction of which, an idea may be formed of its strength, when exerted in scooping out the earth. Fig. 3. The skeleton of its hind-foot.

There

There is another passage, Isaiah ii. 20. where our translation uses the word *Mole*:—"idols shall be thrown to the *Moles*, and the bats;" but the original word here used is not *choled*, but (as it stands in our printed copies) in *two* words, (חפר פרוות) *chaphar pharut*. *Bochart*, however, is for reading these two words as one; and so three copies collated by *Dr. Kennicott* read it. In this case, these *chapharpharut* will derive from the word *chaphar*, to sink, to delve, to dig down into, to penetrate; a very expressive and characteristic notion of a name for the Mole; which, as we have observed, ranks among the best of diggers. But is it likely the Mole should have in Hebrew *two* names? I rather doubt it; and therefore, having appropriated to it the name *choled*, would enquire what these *chapharpharut* can be. To accomplish this, let us examine the passage; which is the more necessary, as the versions have been utterly perplexed about it. *Montanus*, keeping the words in two, renders *to dig depths*; the LXX. ματαια, *vanities*; *Aquila*, ὀρυγας, *depths*, or *ditches*. *Theodotion*, not knowing to which side to incline, preserves the original word.

The general scope of the passage is a threatening against pride, and a denunciation of vengeance on idols and idol worshippers.

Enter into the rock, and hide thee in the dust,
For fear of the Lord, and for the glory of his majesty.

For the day of the Lord of Hosts is upon all that is proud and lofty.

And the idols he shall utterly abolish.

And they shall go into the holes of the rocks—CAVERNS,

And into caves of the earth,—*hollow places of the dust*.

In that very day a man [THE CHIEF] shall cast

His [VERY] idols of silver, and his [VERY] idols of gold,

Which they had made for him to worship,

To the MOLES [*caphtarpharut*] and [even] to the BATS [*othelaphim*.]

To go into the clefts of rocks,

And into the tops [rather *cavities*] of the rugged rocks;

For fear of the Lord, and for the glory of his majesty, &c.

I conjecture that this describes the action of a public personage, a chief, for whom public idols had been provided, in order to be objects of worship in an ostentatious manner; with parade, in temples, exalted on high, magnificently decorated, and numerous attended. This is contrasted by two ideas:—1. The chief himself shall be so terrified, as to flee to caves and dens for shelter. 2. These valuable idols shall be taken from their shrines, and thrown into places as dark, dismal, and abominable, as their former residences had been brilliant, splended, and venerable.

All commentators have perceived this sense to be included in the passage. Bishop *LOWTH* says, "They shall carry their idols with them into the dark caverns, old ruins, or desolate places, to which they shall flee for refuge; and so shall give them up, and relinquish them to the filthy animals that frequent such

such places, and have taken possession of them as their proper habitation." I fear there is a confusion of ideas in this note of the learned author; because, 1. those who fled did not flee to old ruins, to places already ruined, already desolated; but to rocks; 2. their "carrying their idols with them," in order to leave them behind when they came out again,—“relinquish them to the filthy animals,”—seems directly contrary to the prophet's meaning; which implies a getting rid of these idols as fast as possible—instantaneously: neither is it very natural after their fright is over, to leave their deities behind them.

SCHEUZER has approached much nearer as I apprehend, to the import of the passage; and indeed has given it very fairly, though without perceiving it:—“In that day men shall cast down (the idols) from the top of the altar to the bottom of it; and to avoid all occasion of defilement and superstition, shall hide them in dark places, and at the bottom of caverns.” I would somewhat vary this: considering that vengeance and punishment is the matter of the prophecy, perhaps it might be understood to imply, that “in such a day of terror, the chief, the sovereign, who had been used publicly to worship gold and silver idols, shall cast them away into the under-ground vaults, the drains, the *SINKS* of the temple, where they had been honoured; in order to avoid detection, to remove all evidence that ever he had been guilty of doing homage to them.” Can a greater reverse, a stronger contrast, be imagined? Moreover, these *sinks* are at hand, are the readiest places for concealment; and, in fact, history informs us that such have been actually used, on emergencies, for this purpose.

Since then the word *chaphar* explicitly means *to sink*, and this is its proper idea, why not accept it here also, and dismiss the *Mole* from this passage of the prophet; considering *chapharpharut* as a duplication, an emphatical augmentation of the original idea;—*sinks*, DEEP SINKS:—the deepest of cavities.

If it be admitted that the first word means not an animal, but a place, then we must, probably, consider the second as meaning a place also: not *Bats*, but places where bats inhabit, where they breed; as they do in obscure and dark caverns of ancient buildings; such, for instance, as the pyramids in Egypt, here they abound; in our old churches; and, in short, in all subterraneous places, or rather parts of buildings—*subterraneous vaults*; which agrees perfectly with the *sinks*, expressed by the former word. “The chief shall cast his very idols of silver, and his very idols of gold—into sinks and subterraneous vaults, [bat-residences,] and shall himself flee to the caverns of rocks, &c. Otherwise, the passage may be understood very properly, “he shall cast his idols into sinks, even to the bats,” which inhabit such underground vaults and passages. In either rendering we exclude the *Moles*, which never inhabit *rocks*, or ruins, or dwellings, or where bats inhabit (*but beneath the looser softer grounds*, in the open field); and we confine the Hebrew name of the Mole to one word *choled*, by which we have supposed it is expressed in the prohibitory passage in Leviticus.



The Gecko.

OF POISONOUS REPTILES, NOT SERPENTS.

DEUTERONOMY, Chapter xxxii. Verse 33.

THEIR WINE IS THE POISON OF DRAGONS;
AND THE CRUEL VENOM OF ASPES.

ON Lamentations iv. 3. in reference to the word *tanin* and *tannim*, a doubt is suggested whether the term *properly* denotes a serpent; and if not a serpent, then surely not a dragon; which is understood to be a large *old* serpent. On that passage, arguments are directed to prove that a different species of creature is intended:—though perhaps the term itself is general, and includes the whole class of *amphibia*, where it is used in its most extensive sense: in a more confined application, it means fresh-water reptiles of a lengthened shape. But, the passage under consideration by mentioning a *liquid poison* as proceeding from the *tanin*, seems so plainly to imply a serpent, (the only species hitherto considered, and certainly best known, as yielding venom) that it becomes our duty to pay particular attention to it; especially as it has hitherto been usually considered as decisive on the subject.

The allusion here is to the *venom* [*wine*, Eng. Tr.] of the *taninim*; and this *venom* is associated, by comparison, with the *CRUEL venom of asps*. We shall not now inquire, what particular species of serpent is intended by the word *Pethen* [asp], of which the venom is *cruel*; but shall endeavour to prove that the word *tanin*, in this place, may be descriptive of a *lengthened reptile*; and that we are not *obliged* to take it for a serpent.

DEUTERONOMY, Chap. xxxii.

Observe,

Observe, 1. That the word *chemet* (חֶמֶת) should seem to denote a poison of the *inflammatory* kind. Its application in other places of Scripture may furnish much information on its nature. In verse 24, it denotes, "poison of serpents of the dust:"—Psalm lviii. 5. "their venom (*chemet*) is like to the venom of a serpent" (*nachash*); and Psalm cxi. 4. "the venom (*chemet*) of asps (*oceshub* עֲכֻשׁוּב) is under their lips." But the most remarkable passage, where this word occurs, is Job vi. 4. "The arrows of the Almighty stick fast in me; their poison (*chemet*) drinketh up my spirit." So that this *chemet*, whatever it be, was used to poison arrows with; and this poison had the effect of producing thirst. Not to enlarge on the antiquity of rendering arrows fatal by poison, it may be remarked, in passing, that one mode of poisoning them, was by dipping them in the poison of a serpent; so Ovid says of the Scythians, *Pont. lib. i. ep. 11.*

*Qui, mortis sævo geminent ut vulnere causas,
Omnia vipereo spicula felle linunt.*

The "*poisoned arrows*" of Horace, lib. 1. ode 22, are famous; and Homer alludes to *poison for smearing arrows*, *Odyss. 1. line 260.*

In order to deprive the serpent tribes of the *exclusive* property of poisoning these shafts of death, it is necessary to ascertain a reptile, native of these countries, which may answer the purpose equally well as a serpent; with this view, we desire the reader's attention to the Natural History of the *Gecko* of Egypt. The following is a translation from the "*Natural History of Oviparous Quadrupeds*," by the Count *de la Cèpede*; the successor of *Buffon*.

"Of all the oviparous quadrupeds whose history we are publishing, this is the first which contains a *deadly poison*:...Nature in this instance appears to act against herself; in a lizard whose species is but too prolific, she exalts a corrosive liquor, to such a degree as to carry corruption and dissolution among all animals into which this active humor may penetrate;...one might say, she prepares in the *Gecko* only principles of death and of annihilation. This deadly lizard, which deserves all our attention by his dangerous properties, has some resemblance to the camelion; his head, almost triangular, is large in comparison to his body; the eyes are very large, the tongue flat, covered with small scales, and the end is rounded; the teeth are sharp, and so strong, that according to *Bontius* they are able to make impressions on the hardest substances; even on steel. The *Gecko* is almost intirely covered with little warts, more or less rising; the under part of the thighs is furnished with a row of tubercles, raised and grooved. The feet are remarkable for oval scales, more or less hollowed in the middle, as large as the under surface of the toes themselves, and regularly disposed one over another, like the slates on a roof. The tail of the *Gecko* is commonly rather longer than the body; though sometimes not so long: it is round, thin, and covered with circular rings, or bands, formed of several rows of very small scales. The colour of the *Gecko* is, a clear green, spotted with brilliant red. The name *Gecko* imitates the cry of this animal,

which

which is heard especially before rain. It is found in Egypt, India, at Amboyna, te Moluccas, &c. It inhabits by choice the crevices of half rotten trees, as well as humid places; it is sometimes met with in houses, where it occasions great alarm, and where every exertion is used to destroy it speedily. *Bontius* writes, that his bite is so venomous, that if the part bitten is not cut away, or burned, death ensues in a few hours."

The following is the account of *Bontius* [or rather *Nieuhoff*,] copied *verbatim*, from his Travels, in Churchill's Voyages, Vol. II. page 12.

"This creature, which is not only found in Brasil, but also in the isle of Java, belonging to the East Indies, and which, by our people is called *Gekko*, from its constant cry (like among us that of the cuckoe) is properly an *Indian Salamander*. It is about a foot long, its skin is of a pale or sea-green colour, with red spots. The head is not unlike that of a tortoise, with a streight mouth. The eyes are very large, starting out of the head, with long and small eye-apples [eye-balls]. The tail is distinguished by several white rings: its teeth are so sharp as to make an impression even on steel. Each of its four legs has five crooked claws armed on the end with nails. Its gait is very slow, but wherever it fastens it is not easily removed. It dwells commonly upon rotten trees, or among the ruins of old houses and churches; it oftentimes settles near the bedsteads, which makes sometimes the Moors pull down their huts.

"Its constant cry is *Gekko*, but before it begins it makes a kind of hissing noise. The sting of this creature is so venomous, that the wound proves mortal, unless it be immediately burnt with a red hot iron, or cut off. The blood is of a palish colour, resembling poison itself.

"The Javanese use to dip their arrows in the blood of this creature; and those who deal in poison among them (an art much esteemed in the island of Java, by both sexes) hang it up with a string tied to the tail on the ceiling, by which means it being exasperated to the highest pitch, sends forth a yellow liquor out of its mouth, which they gather in small pots set underneath, and afterwards coagulate into a body in the sun. This they continue for several months together, by given daily food to the creature. It is unquestionably the strongest poison in the world; its urine being of so corrosive a quality, that it not only raises blisters, wherever it touches the skin, but turns the flesh black, and causes a gangrene. The inhabitants of the East Indies say, that the best remedy against this poison is the *curcumie* root. Such a *Gekko* was got within the body of the wall of the church in the *Receif*, which obliged us to have a great hole made in the said wall, to dislodge it from thence." So far our author.

"After rain the *Gecko* quits his retreat; his walk is not very quick: he catches ants and worms. The eggs of this creature are oval, and commonly as large as a nut. The female covers them carefully with a slight shelter of earth; and the heat of the sun hatches them. The Jesuit mathematicians,
sent

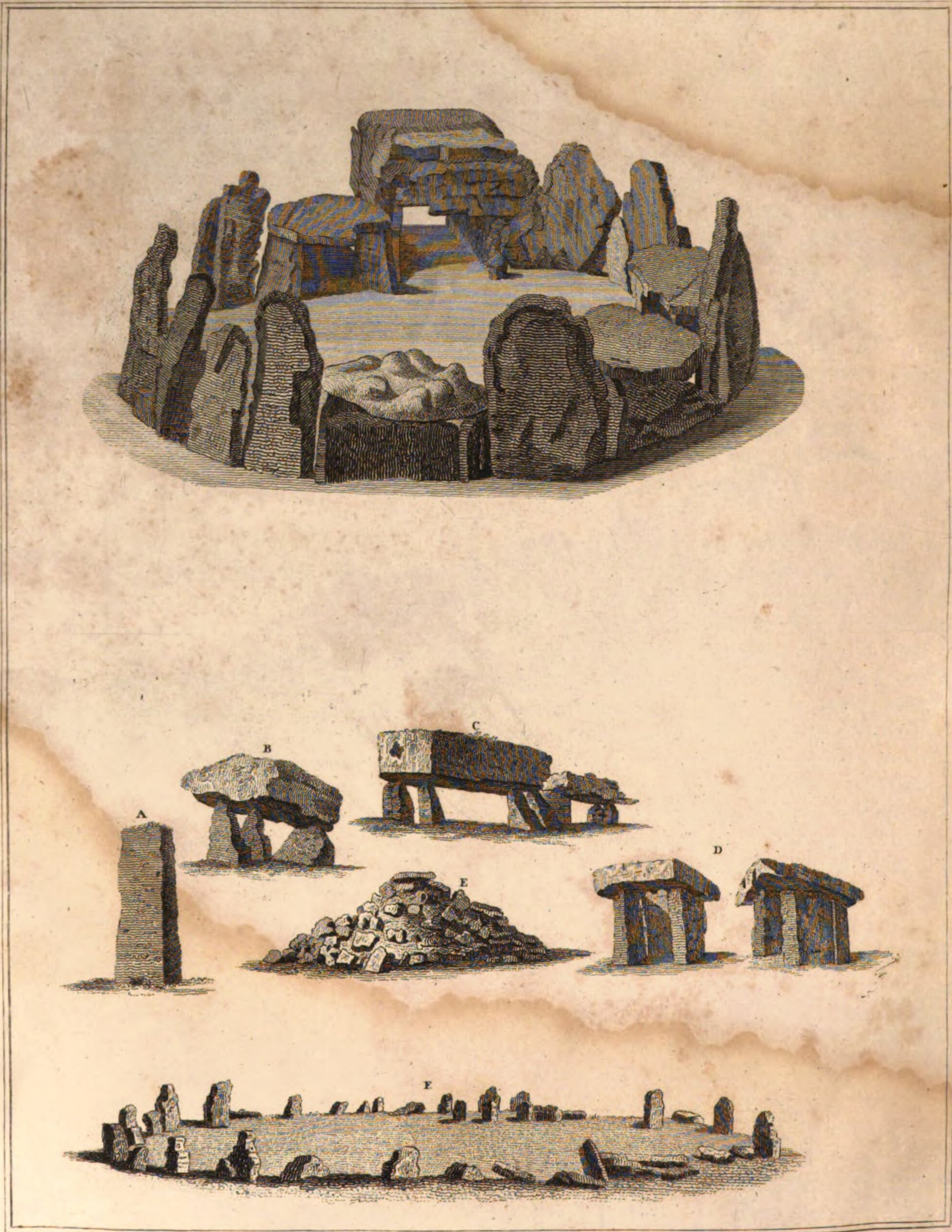
sent into the East Indies, by Louis XIV. have described a lizard in the kingdom of Siam, named *tokaie*, which is evidently the same as the *gekko*. That which they examined exceeded one foot in length, to the end of the tail. The name *tokaie*, like that of *gekko*, is an imitation of sounds made by the creature."

Hasselquist writes thus concerning the *Gekko*. "He is very common at Cairo, as well in the houses as without. The venom of this animal has a singularity, in that it issues from the balls of the toes. He seeks all places and things where salt has been employed; and where he has walked over them, this dangerous venom marks his track. In the month of *July*, 1750, I saw two women and a girl at Cairo, who narrowly escaped death, from having eaten cheese on which this animal had shed his venom. I had another occasion at Cairo, of being convinced of the sharpness of his venom, as he run over the hand of a man, who was endeavouring to catch him, his hand was instantly covered with red inflamed pustules, attended by a sensation like that which is caused by the stinging of a nettle. He croaks at night almost like a frog."

The reptile now ascertained, in malignity yields to no serpent whatever; he inhabits Cairo, and the country of Egypt; so that he could not be unknown to Moses: nor is he confined to desert places, but visits houses, and makes his abode in them; so that the people of Israel, to whom Moses speaks, might be well acquainted with him. We find, also, that his poison is justly associated with the *cruel* venom of asps; and that his slaver, &c. is collected for the express purpose of smearing arrows, and rendering fatal the wounds made by them. The result of these enquiries is, that we may still retain the idea of a *lengthened reptile*, as expressing the figure of the *tanin* and *taninim*, without fearing that the venom attributed to these creatures, (hitherto understood to be serpents on this account chiefly,) should oblige us to relinquish that interpretation of the original word, with the extent of whose application in the Hebrew language we are, perhaps, not altogether fully acquainted.

May this enquiry lead to a distinction between the Hebrew words *chemet* and *rosh*?—of which, the first may signify *poison*; the second *venom in the head*; in which part, as it is well known, the poison of the serpent tribe resides.

As this passage in Deuteronomy is spoken metaphorically of a poisonous vine, or plant bearing berries which yield a liquor,—what is this plant? SCHEUZER inclines to *hemlock*: but, does hemlock yield a wine? and is its poison *inflammatory*? I think it is not.



GIL GAL.

religion

and its race

several fathers

with them

received



JUDGES, CHAPTER III. VERSE 9.

EVERY thing leads to the conclusion that the Religion of mankind was originally the same, in its objects, its principles, and its rites; and that to wherever the original tribes of men, with their natural fathers at their head, migrated, or wherever they settled, they took with them those religious customs, notions, and references, which they had received as part of their patrimony, from their ancestors in the land of their primary residence. This is of some consequence to us, because Scripture being in many passages very concise, or merely employing allusions, the writers in numerous instances taking things to be too well known to need explanation (as indeed they were, to their primary readers), we are glad to avail ourselves of whatever may contribute to a better understanding of those concisenesses, those non-explanations, which puzzle and perplex present readers. We naturally turn with a kind of general interest to our own island; and especially, when any remains of that original religion which we have attributed to all mankind are discovered in it, we embrace with pleasure the opportunities they afford of inquiring what relation they may bear to subjects incidentally presented by Scripture. When among the national antiquities of Britain some great stone raised into an upright position presents itself, as a memorial, we recollect that Jacob raised a stone as a memorial too; when our notice is attracted by many stones forming heaps, the heap of many stones formed by Jacob and Laban recurs to recollection; stones of great magnitude composed with labor, effort, and skill, into a circle, remind us that Joshua directed the men of Israel to compose a circle of great stones: and when the idea of a holy place, a place for worship, is connected with such a structure of stones, we inquire whether somewhat similar were not the character of Gilgal, which is so often and so solemnly mentioned in Holy Writ; the "*quarries*" [Eng. Tr.] which may perhaps receive explanation from Druidical remains still extant in this island. Was Abraham a Druid?—He was as fond of the oak as any Druid could be. Was Joshua a Druid?—He approached to that character, when he raised a great stone under the oak at which stood the tabernacle at Shechem, and when he observed that the venerable tree "had heard the words of the covenant," &c. Was Samuel a Druid?—When he erected his *Ebenezer*, his "stone of help," at least, he did that which a Druid would have done. Did Moses forbid the use of iron, the contact of which metal would have been a pollution, to the stones of the altar? So did the Druids: they also might say "An altar of earth, or of rough stones, stones in their natural state, shalt thou raise." The subject of this paper will, it is presumed, vindicate these comparisons; but, it will be remembered that they are suggestions only, not even propositions, much less are they *dogmata*.

JUDGES, CHAPTER III. VERSE 9.

The

The following information is from GROSE, *Antiquities*, Vol. I. p. 135, &c.

DRUIDICAL MONUMENTS.

DRUIDICAL Monuments consist of *Obelisks*, being large stones or pillars set up perpendicularly, *Carnes* or *Carnedes*, *Cromlehs* or *Cromleiches*, *Kist vaens*, *Rocking stones*, *Tolmen* or stones of passage, Rock basons, and circles or ovals.

OF SINGLE STONES.

THESE monuments are the most simple, and undoubtedly of more ancient date than Druidism itself; they were placed as memorials recording different events, such as remarkable instances of God's mercies, contracts, singular victories, boundaries, and sometimes sepulchres: various instances of these monuments, erected by the patriarchs, occur in the Old Testament. Such was that raised by Jacob at *Luz*, afterwards by him named *Bethel*; such also was the pillar placed by him over the grave of *Rachael*. They were likewise marks of execrations, and magical talismans.

CARNES.

CARNES, or *Carneds*, were commonly situated on eminences so that they might be visible one from the other: they are formed of stones of all dimensions, thrown together in a conical form, a flat stone crowning the apex; the ramp or ascent is generally pretty easy, though Toland supposes the Druids ascended them by means of ladders. Carnes are of different sizes, some of them containing at least an hundred cart loads of stones. According to the writer above cited, fires were kindled on the tops or flat stones, at certain times of the year, particularly on the eves of the first of May and the first of November, for the purpose of sacrificing, at which time all the people having extinguished their domestic hearths, rekindled them from the sacred fires of the Carnes.

MR. ROWLAND, in his *Mona Antiqua*, supposes the smaller *Carnedes* to be sepulchral monuments, formed with stones thrown on the grave by the friends of the deceased, not only with an intent to mark the place of their interment, but also to protect their corps from wild beasts and other injuries, but allows the larger monuments of this kind, particularly, when accompanied by standing pillars of stone, to have been erected as marks of sacrifices or some religious ceremony, such as the solemn convention recorded by Moses to have been made between Jacob and Laban.

KIST VAENS.

KIST VAENS, that is, stone chests, commonly consist of four flags or thin stones, two of which are set up edgeways, nearly parallel; a third, shorter than the other two, is placed at right angles to them, thus, forming the sides, and closing the end of the chest; the fourth, laid flat on the top, makes the lid or cover, which, on account of the inequality of its supporters, inclines

to

to the horizon at the closed end. Mr. Toland supposes Kist vaens to have been altars for sacrifice, most of them having originally belonged to a circle or temple; the inclination of the covering he imagines to have been intended to facilitate the draining of the blood from the victim into that holy vessel placed to receive it: he denies their having been places of burial, saying the bones frequently found near them were the remains of the victims. These monuments are in the islands of Guernsey and Jersey still called *autels*, or altars; and *poquelays*; i. e. a heap of stones. Mr. Borlace, in his History of Cornwall, combats the notion of their being altars for sacrifice, and on the contrary, judges them to be sepulchral monuments, and, in support of his opinion, urges several reasons. Mr. Rowland takes the middle between both, saying, "their being sepulchral monuments I deny not, but there may be some appearance of truth, yet consistent enough of what I have said of them, for they may be both sepulchres and altars in a different sense, I mean those of latter erection, because when the great men of the first ages fell, who were eminent among the people for some extraordinary qualities and virtues, their enamoured posterity continued their veneration of them to their very graves, over which they probably erected some of these altars or *cromlechs*, on which when the true religion became depraved and corrupted, they might make oblations and other sacrifices to their departed ghosts.

THE CROMLEH.

THE *Cromlech*, or *Cromleh*, chiefly differs from the Kist vaen, in not being closed up at the end and sides; that is, in not so much partaking of the chest-like figure; it is also generally of larger dimensions, and sometimes consists of a greater number of stones: the terms *Cromleh* and *Kist vaen* are however indiscriminately used for the same monument. The term *Cromlech* is derived from the Armoric word *crum*, crooked or bowing, and *leh*, stone, alluding to the reverence which persons paid to them by bowing. Rowland derives it from Hebrew words, signifying a devoted or consecrated stone.

CIRCLES, OVALS, &c.

THESE, it is now generally agreed, were temples, and many writers think also places of solemn assemblies for councils or elections, and seats of judgment. Mr. Borlace is of this opinion; "instead therefore (says he) of detaining the reader with a dispute, whether they were places of worship or council, it may with great probability be asserted, that they were used for both purposes, and having for the most part been first dedicated to religion, naturally became afterwards the *curiæ* and *foræ* of the same community."

These temples, though generally circular, occasionally differ as well in figure as magnitude; with relation to the first, the most simple were composed

posed of one circle: Stonehenge consisted of two circles and two ovals, respectively concentric, whilst that at Bottalch, near St. Just, in Cornwall, is formed by four intersecting circles. And the great temple at Abury, in Wiltshire, it is said, described the figure of a seraph, or fiery flying serpent, represented by circles and right lines. Some, besides circles, have avenues of stone pillars. Most, if not all of them, have pillars or altars within their penetralia or center.

In the article of magnitude and number of stones, there is the greatest variety. Some circles being only twelve feet diameter, and formed only of twelve stones, whilst others, such as Stonehenge and Abury, contained, the first one hundred and forty, and the second six-hundred and fifty-two, and occupied many acres of ground.

EXPLANATION OF THE SUBJECTS ON THE PLATE.

Fig. A. is a simple stone, of sufficient magnitude not to be overlooked, erected in some conspicuous situation, as a mark, or memorial of some transaction, &c. Such a stone might be called in Hebrew מִיִּתְּפֶה מִיִּתְּפֶה. So we read, Gen. xxviii. 18. "Jacob took the stone which had served him for a pillow, or shelter for his head during the night, and set up (מָאֵל) that very stone, for a *mitjpeh* or pillar; and poured oil on the head of it:" it was a single stone, certainly. It should appear from chap. xxxv. 7. that Jacob afterwards proceeded to augment, as it were, the consecration of this place, in a manner yet more solemn, for he built an altar there, or at least a sacrificatory; and verse 14. Jacob set up a pillar even a pillar of stone, *i. e.* a large stone, or several stones, as foundation and superstructure, perhaps, for a memorial. It should seem that, in after ages, the veneration of the people, his descendants, for these pillars, and for others of a like nature, led to a prohibition of them; for we read, Lev. xxvi. 1. "You shall make no *alilim*, nor *pesil*, nor *mitjbeh*; nor shall you erect to yourselves a stone of observation, *i. e.* an observable stone, in your land, to bow down to it." This *bowing down*, was no doubt, of the nature of the worship paid in the high places so often mentioned in S. S. the principle of which appears to have maintained itself so late as the discourse of the woman of Samaria, "Our fathers worshipped in this mountain:"—and, indeed, this veneration, is not wholly extinct at this day, even in Britain.

We read, Joshua xxiv. 26. that "Joshua took a great stone, and set it up in Shechem, under (אֵל) THE oak which was IN (אֵל), the sanctuary of the Lord; and said, "this stone shall be a witness," &c. it will follow, therefore, that Joshua did not understand the precept in Leviticus as prohibiting national memorials, but as prohibiting idolatry; against which he concluded he had guarded sufficiently by erecting this stone in a place already dedicated to the worship of Jehovah.

We

We read also, 1 Sam. vi. 18. of a great stone (Abel) which seems to have afforded a proper place for sacrificing. Samuel also, as related in the next chapter, erected "Eben-Ezer," the stone of help, as a memorial of national mercy and deliverance. This prophet, therefore, understood the prohibition formerly given as applicable only to the abuse of such memorials.

Mr. GROSE, as we have seen, describes KIST VAENS and CROMLECHS as nearly similar; and Rowland, another writer on British Antiquities, derives the latter from Hebrew words, signifying a consecrated stone. It is not certain whether any difference be meant by a distinction between the Hebrew מִצְבֶּה מִיְּבֵה, and מִצְבֶּה, מִיְּבֵה, מִיְּבֵה, מִיְּבֵה; but possibly *mitjpeh* implies a single stone, a pillar only; and *mitjbit* may mean a cavity of stones, or stones so placed as to form a kind of house within, or, at least, several stones, as it seems to have a plural termination. If so, may this be the *Kist-vaen*, or *Cromlech*, which has some similitude to a house? (at least it is a *construction* of stones;) might such be the *tumulus* which Jacob erected over the grave of his beloved and honoured Rachel? Gen. xxxv. 20. Rachel died; "and Jacob set up a *metjbeh* (עֵל) over her sepulchre, or grave: This is the *metjbit* [Kist-vaen, or Cromlech?] of Rachel's grave to this day:" *i. e.* Jacob formed a mound of earth, over the place where Rachel was buried [the *taphos* of the Greeks]; in this mound he cased a grave with stones, and laid a stone of the greatest magnitude he could procure, over the top of them. Or, did any tall pillar rise above this ground? which pillar consequently was visible from a much greater distance. Homer furnishes instances of similar erections.

In the plate, fig. B, C, are CROMLECHS; the first stands near Dundalk, in Ireland: the second near Plaisnewdd, in Anglesea. Fig. D are KIST VAEN; that these are sepulchral seems to be effectively shewn in Mr. GROSE: but Mr. KING, in his "Munimenta Antiqua," considers these also as altars; and thinks that human sacrifices were publicly offered upon them: an idea which ought not to be adopted till after adequate examination, as the number of these *cromlechs*, yet extant, would imply a very great waste of human blood: moreover, how many similar edifices are destroyed, of which nothing has been known in latter ages!

E, is a CARNE or CARNEDD; in fact, a mound or hill of stones. I would observe, first, that this word is undoubtedly from the Hebrew קֶרֶן *keren*, or *kern*, which is usually rendered *horn*; but which very properly (as this example shews) is rendered by our translators, Isaiah v. 1. "my beloved hath a vineyard on a very fruitful hill:" Heb. on a horn, the son of oil; *i. e.* such a *carn* or *kern*, as rises into the shape of a hill,—like our figure. Secondly, that as such collections of stones have very much the air of having been made in haste and hurry; it is probable, that not altogether unlike this was "the heap of witness" of Jacob and Laban, Gen. xxxi. "And Jacob took a stone, and set it up for a *mitjbeh*; and Jacob said to his brethren, "gather stones," and they

they gathered stones, and they made (גל GAL) a circle (or round heap, as our translators suppose) and called it *iegar sahadutha*, or *gal-od*; the heap (or round) of witness—also *mitjpeh*; saying, the Lord (*itjpeh*) witness between me and thee.” However, this is not meant to deny that they *might* take more time, and form a fairer circle of stones (of any convenient dimensions) like fig. F, and this circle might surround such a pillar; for they seem to be distinguished—“this *circle* be witness, and this *pillar* be witness;” or, the pillar might be in front, or, &c. of such a heap or *carn*.

Further reference to fig. E, affords the remark, that it was customary to commemorate sinister events, occasioned by transgression, by raising a heap of stones over the burial place of the party who had transgressed. So when Israel buried Achan, Joshua vii. 26. “They raised over him a great heap of stones,” which endured for ages. The same over the king of Ai, Joshua viii. 29: and the same in the instance of Absalom, 2 Sam. xviii. 17. “a very great heap of stones.” Now these must have been more or less of the nature of this figure; and that such collections were well calculated for preserving the memory of events appears by the existence of such memorials, from the remotest ages to this day, in our own country. Nothing of any further pillar, *mitjpeh*, or memorial, is discernible as connected with these *tumuli*.

When the reader has considered fig. F. G. I would ask, whether they may not furnish an idea of the place, &c. named Gilgal, in the Old Testament: for we read, Josh. iv. 5. that twelve great stones were taken from the midst of Jordan, to be a *sign*, when their children should ask in time to come; and verse 20. those twelve stones which they took out of Jordan, did Joshua pitch in *circle circle*: *gil-gal*. We have seen in Mr. GROSE, that sometimes the Druidical circles were single; sometimes they were more than one, concentric, sometimes otherwise; it is clear, that those stones pitched by Joshua formed a circle; and by attending to the history, we find it afterwards became a place of veneration and consequence. In chap. v. 9. another reason is added for the name *Gilgal*, not inconsistent with the former account; for the Rabbins relate, that the foreskins of the people formed two little hills; smaller no doubt, but in shape like fig. E.—these were *round round*; *i. e. gal-gal*; whence the name might imply, 1. A circle of stones, and 2. A round heap of foreskins; *i. e. circle upon circle*.

The Druidical circles were certainly temples, or they answered the purposes of temples: let us transfer this idea, with that of their proper attendants, to Gilgal; and consider a few passages. Judges ii. 1. “A messenger (margin) of the Lord came up from Gilgal,”—where was a station of priests, prophets, &c.—to reprove the people. Again, this suggests very different ideas on the behaviour of Ehud, Judges iii. 19. who having offered his present to the king of Moab, sent away his people who had brought it; but himself *returned*—to the royal presence, suppose, [or, shall we take the word in the Chaldee

sense

sense of it? *but he himself resumed his speech* relating to] *i. e.* pretending to have been lately at the *pesilim*, cuttings, carvings, which are (פסילימ) the *very gil-gal*—circles. Here the word *pesilim* seems to denote the stones themselves; whereas *gil-gal* denotes the figure in which they were placed; *i. e.* circularly. Now, as Ehud affected to deliver a message from God, which he pretended to have received at this place, the king could not have credited this pretence, had not some establishment, capable of furnishing an oracle, been well known to exist there: consequently, the very pretence implies a sacred station.

A correspondent dignity is indicated in the circuits of Samuel, 1 Sam. vii. 16. *He went yearly to Bethel*, where unquestionably was a place of sacred stones; *to Gilgal*, where was another place of sacred stones; *and to Mizpeh*, where, as the name itself imports, was a pillar of commemoration. [Vide also 1 Sam. x. 17. Macc. iii. 46. Judges xx.] These places of sacred character, of public assembly, and therefore of national notoriety, Samuel chose for his stations of justice; surely for reasons derived from the nature of the places, and from ideas connected with them by the people at large, which should induce them to expect their principal magistrate, at such *courts of adjudication*.

Gilgal was also a place adapted to the offering of burnt-offerings, peace-offerings, &c. for such is implied in the promise of Samuel to Saul, 1 Sam. x. 8. The people also transacted civil business at Gilgal; for so we read, 1 Sam. xi. 15. “the people went to Gilgal, and made Saul king, before the Lord in Gilgal”—the very Stonehenge of the Hebrew nation! See also, 1 Sam. xiii. 7. &c. xv. 33. Observe the same veneration for Gilgal, in the return of David, 2 Sam. xix. 15. 40. “Judah came to Gilgal to meet the king;”—“the king went on to Gilgal.” That a college of priests and prophets existed at Gilgal, is clear, from 2 Kings ii. 1. Elisha went with Elijah from Gilgal; which should seem to have been his customary residence.

When we recollect, therefore, that the Druidical circles of stones were temples; that the greatest Druidical circle of stones, in our island, was the place of assembly for the whole people, as it were; that here were solemn compacts made, solemn treaties ratified, and national faith pledged, to say nothing of the administration of public justice, &c. &c. the conformity to some of those ideas which prevailed among the Hebrews in their early commonwealth is striking; and those ideas their greatest prophets and magistrates were far from reproving; but rather countenanced and supported them. The lesser erections of stones, their masses, their forms, their application, which appear most clearly in the earliest Scripture ages, support the acknowledgment, of a similitude no less striking between the remote islands of the West, and the patriarchs of Palestine in the East. The sons of Japhet unquestionably derived many of their institutions from the same sources as the more favoured sons of Shem; and these resemblances confirm the proposition that “God has made of one blood all nations of men.” Our

Our upper figure is thus described by Mr. GROSE, Antiq. Vol. VIII.

DRUIDICAL TEMPLE IN THE ISLAND OF JERSEY.

THIS temple is situated on the top of a pretty high rocky hill, near the town of St. Helier. It was covered with earth, perhaps done by the Druids to secure it from profanation by the Romans; in that state it had much the appearance of a large barrow or tumulus. It continued thus hidden till the colonel of the St. Helier militia, procuring the ground to be levelled for the more convenient exercise of his corps, the workmen discovered and cleared it.

An exact model of this curious piece of antiquity was made on the spot, and sent to General Conway, governor of the island, from which, by the favour of the Hon. Mr. Horace Walpole, these drawings were made. There was no scale to this model, neither were the cardinal points of the compass marked; but from an account and plan communicated to the Antiquarian Society, the whole seems to have been of very small dimensions; this temple itself, compared to many structures of the same kind, being very little more than a model.

Many other Druidical monuments have been discovered here, and in the neighbouring islands of Guernsey, Alderney, and Sark; but most of them have been pulled down, and used for building or repairing fences; this however proves that none of them were very large.

This temple consisted of a circle of about twenty feet diameter, formed by rude unhewn stones set upright; and, when entire, had within it six cells covered at the top, and open inwards towards its center, called *Cromlehs*; the area of the largest of these was about four feet three inches square, its height three feet seven inches; another of less area measures four feet in height: one of these cells, on the north-east side, has been demolished; whether by the workmen in the discovery, or otherwise, is not certain.

To this circle, on the south-east side, is attached a covered entrance, the uprights composed of many rough stones set parallel to the diameter, and covered at the top by four equally irregular; this passage measures on the inside about fifteen feet in depth, five feet three inches in breadth, and four feet four inches in height. About five or six feet south-east of the entrance, is a single stone that seemingly belonged to the temple.

This view shews the western side of the circle looking towards the inward opening of the covered passage or entry.—It was drawn 1786.



DAGON.

ON THE IMAGE AND CHARACTER OF DAGON.

I. SABBATH, Chapter V.

DAGON employed our researches formerly, not so much to discover the signification of the words which compose his name, than to bring a deity particularized in Scripture, 1. Sam. v. and called Dagou, into connection with the representation of the LXX. *Isidore* 241. 1. states the Hebrew name of the demon reads *Nebo* — "Bel boweth down — Nebo Dagou." As the derivation of this name is not likely to be accidental, there must have been such an identity between the deities *Nebo* and *Dagon*, as induced or permitted their translation upon the one by the other. We have remarked (see *Isidore* 241. 1. plate) that *Nebo* was another character of Baal; and was, occasionally, a type or a symbol. We also observed formerly of *Dagon*, that he was a god or goddess (*Deity*) under the same emblematical representation, but differing in sex. The LXX. therefore do not deviate from the duty intended by the prophet, when instead of describing him under one of his characters they adopt any character equally proper to him.

Dagon has been considered as an allegorical representation of the patriarch Noah; and under that character we shall proceed to narrate his history.

The following is from *Isidore*. — The first year there came up, according to Berosus, from the waters of the Red Sea [the Indian ocean] and appeared on the shore contiguous to Babylon, a creature vast of mason [this is a palpable error, as the whole history shows; therefore our author must have meant a creature truly wise] named *Utnapishtim*; and as Apollonius reports, having the whole body of a fish; above the head of the fish, rose another head of a man; he had human feet, (or legs) which came out from each of the two sides of the tail; he had also human voice and speech. There will presently be, says Berosus, his resemblance painted. This creature remained on the shore, during the day, among the natives, talking and conversing with them; and conversed with them from time to time. He taught them letters and numbers; showed them the arts of life; instructed them in husbandry; how to till the earth; to institute laws; to study geometry; the various properties of the elements; and committing to the earth the seeds of fruits, and of plants, that they might grow; and generally, whatever conduces to wisdom and to peace the happiness of mankind. Since that period nothing more was seen of him. He was seen only on the day of the sun; this creature, *Utnapishtim*, was the same as the *Utnapishtim* who passed the night in the ark. The name of this creature is *Utnapishtim*; and when Berosus promises to show what he means by the name of the

I. SABBATH, Chapter V. King.



ON THE IMAGE AND CHARACTER OF DAGON.

1 SAMUEL, Chapter v.

DAGON employed our researches formerly, not less with intent to discover the signification of the words which compose his name, than as being a deity particularized in Scripture, 1 Sam. v. and we find *Dagon* mentioned again in the translation of the LXX, *Isaiah* xlvi. 1. where the Hebrew and our translation reads *Nebo*:—"Bel boweth down—Nebo[*Dagon*] stoopeth." As the substitution of this name is not likely to be accidental, there must have been such an affinity between the deities *Nebo* and *Dagon*, as induced or permitted those translators to express one by the other. We have remarked (on Baal and Moloch, plate,) that *Nebo* was another character of Baal; and was, occasionally, a male or a female. We also observed formerly of *Dagon*, that he was a god or goddess (*Derketos*) under the same emblematical representation, but differing in sex. The LXX. therefore do not deviate from the deity intended by the prophet, when instead of describing him under one of his characters they adopt another equally proper to him.

Dagon has been considered as an allegorical representation of the great patriarch Noah; and under that character we shall proceed to investigate his history.

The following is from Syncellus. "The first year there came up, according to Berosus, from the waters of the Red Sea [the Indian ocean] and appeared on the shore contiguous to Babylonia, a creature void of reason [this is a palpable error, as the whole history shews; therefore for ζῶον ἀφρονον read ζῶον εὐφρονον, a creature TRULY WISE] named *Oannes*; and as Apollodorus reports, having the whole body of a fish; above the head of this fish, rose another head (of a man); he had human feet, (or legs) which came out from each of the two sides of the tail: he had also human voice and language. They still preserve at Babylon, says Berosus, his resemblance painted. This creature remained sometime, during the day, among the natives, without taking any nourishment, and conversed with them from time to time: he taught them letters and learning; shewed them the arts of life; instructed them to build cities; to raise temples to the deity; to institute laws; to study geometry: the various manners [and seasons] of committing to the earth the seeds of fruits, and of gathering their productions: and generally, whatever conduces to soften and to polish the manners of mankind. Since that period nothing more has been heard of him. After the setting of the sun, this creature, *Oannes*, went toward the sea, plunged into it, and passed the night in the water. Afterwards, other similar creatures appeared; concerning whom Berosus promises to relate many things, in his history of the

Kings." This "history" is unfortunately lost: but *Oannes* is thus mentioned by Apollodorus (in Syncellus). "Berosus reports," says he, "that Alorus was the first king of Babylon, native of that city; he reigned ten *sari*: then came Alasparus and Amelonus, of the country of Pantibiblos; then the Chaldean Ammenonus, under whose reign was seen to issue from the Red Sea that *Oannes* which Alexander Polyhistor, by anticipation of time, placed in the first year, and which we place after a lapse of forty *sari*. Abydenus places the second *Oannes* after a period of twenty-six *sari*."

Apollodorus goes on to mention other kings, as Meg Alorus, (*Megas Alorus?*) Da-onus, (possibly, *Dé-AUN-us*) and Evedorachus, in whose time appeared another creature, half man, half fish, named *ω Δαγών*, o *DAGON*:— *THE Dagon*."

Helladius, an author of the fourth century, cited by Photius (*Biblioth.* p. 194.) also, reports "that a person named OAN, was seen in the Red Sea: who had the body of a fish; but his head, feet, and hands, were human; he taught the use of letters and astronomy. Some said he was born of the first parent, which is the egg. This OAN was altogether a man; and he appeared like a fish, only because he was covered with the skin of a fish." It seems proper to read this name as with the Greek article o AUN;—*THE Aun*.

It is clear that *Oän* is the same as *Oannes*; and that *Oannes* is the same as *THE Dagon*. "He was a man, but clad with the appearance of a fish;"—"he was born of the first parent, the egg."—This egg once contained all mankind; *omnia ex ovo*; this fish once preserved not only the human race, but the races of animals: *Magna Deum Mater, Materque Ferarum*.

Unquestionably these accounts, though mutilated, contain much truth: but it is possible that the later appearances of this personage may refer to the introduction of his worship; or the renewal of its rites, by priests devoted to him: unless, we should rather suppose them to be traditions of his *first* appearance, erroneously placed. It is by no means improbable that his earliest name was *Oän*, [AN] which afterwards received a terminating syllable, *Oannes*, or even *Oannaus* or *Oannaos*, for the last syllable is *long*, and *accented*; so that the pronunciation easily slides into this difference. This would denote—the *nes*, *naus*, i. e. the ship, or vessel, of *An*; and as we read that *Oän* retired every night to the sea, it must have been to a vessel, where he abode during night, and whence he appeared in the morning. This is the principal point to be established: and the consideration of it leads us to observe, that the compound name of the deity *Dag-aun*, is precisely of the same meaning as *O-AUN-nes*; *dag* signifying a ship, or vessel,—*q*. "the ship of Aun:" So far these titles agree in their import. Scaliger thinks that both have suffered in their true spelling; though perhaps it still represents their pronunciation in ancient ages. Our current pronunciation is notoriously incorrect; for we ought to say *Dagoon*, or *Dagoun*; and *Ouannes*, or *Ouaunnees*, *q*. *o aunnees*: which would be literally "the Aun vessel;" the vessel or ship of Aun.

We cannot expect to find the allegorical deity *Dag-aun* represented both in the (allegorical) state or form of a fish (or included in a fish) and in the

the form of a ship, at the same time: because, the fish signifying a *ship*, when it is used as implying *Dagaun*, there is no need of the *ship*; and when the *ship* is used, there is no need of the *fish*. This interchangeableness of these symbols, the *fish* and the *ship*, must be insisted on: and indeed, is implied in the histories extracted above: for the egg which contained all mankind within it, is said to have floated on the Red Sea, and to have come on shore in the Euphrates (in Babylonia, says Berosus). *Hyginus* has this historical fable, 197. "An egg, of a wonderful magnitude, is said to have fallen from heaven into the river Euphrates, which was conducted to the shore by fishes: over this brooded a dove, whose warmth hatched it, and produced Venus, subsequently called *The Syrian goddess*:" after which, as rectitude and probity directed, and as was appointed by Jupiter, the fishes were inserted among the heavenly constellations. For this reason, the Syrians, though they have numbers of doves and fishes, do not eat them." A story to the same effect is told in different words by *Lucius Ampelius*, in his work addressed to *Maerinus*. [See *Bayer*, additions to *Selden*.] It is said, that in the river Euphrates the egg of a fish was brooded over by a dove during many days, from which issued the Goddess benign and propitious to men, leading them to the most excellent life." This is clearly the *Venus* of *Hyginus's* fable. It is evident that the egg of these histories is a vessel. We have seen, in considering *Baal* and *Moloch*, that *Moloch* was a goddess, the same as *Ashtoreth* of the *Zidonians* (*i. e. Venus*), the same also as *Nebo*, who was a female deity, as appears by her pregnancy (*i. e. Venus*), and we observe, that instead of *Nebo*, the *LXX.* substitute *Dagaun*; which shews that those translators considered these divinities as the same:—In perfect coincidence with our extract from *Helladius*, who says that *Oan*, or *Aun*, was born of an egg—*i. e. a vessel*; since, as we learn from the fabulist, this egg floated, vessel like, on the Euphrates.

Another—a direct, proof that the word *Dag-aun* signifies "the *ship* of *Aun*"; is derived from *Philo Biblius*, who says expressly, "*Dagaun* is *Sidon*:" and this is universally received among the learned. Now, this word analyzed divides into *Sid-aun*; or rather, as written in the Hebrew, *tzidé-aun*:—the name of the ancient city *Sidon*, which has preserved its true name, and is called at this day *Seidé*; and so we read of *Beth-saida*, *Matth. xi. 21. i. e. the temple of Seidé*: which shews the true pronounciation of this word. The Hebrew of *Sidon* would therefore be at full length (צידה-און) *tzidé-aun*; melted by common speech into *tzid'-aun*—*Sidon*. What is this *tzi* (צ)?—All our dictionaries and lexicons answer, *unâ voce*, "*tzi* is a decked ship, or vessel, which carries men and goods dry, as distinguished from an open boat." Why then, this is the very same as *Dag*, for that also is a vessel, which preserves in security what had been committed to it, by keeping its contents from the water; *i. e. preserving them dry*. These two appellations illustrate each other: *Dag* and *tzi* are the same, in nature and application: but the *dé* ought properly to be retained in pronounciation, as in *saida*, being the Chaldaic *da*; "THE *tzi*." This reference is strengthened by analyzing the Greek name of the deity, *Poseidon*, which is written at length, Ποσειδών, —and divided, PO-SEIDA-ON, or SEIDA-AUN; now

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Po-seida-aun is addressed in the Orphic hymns as "Father of gods and men; the author of peace and rest; the cause of affluence;" *i. e.* the second Father of mankind, who taught them husbandry, &c. &c. By the later Greek writers, this name is given to Neptune, the god of the sea, and of ships:—It is clear, therefore, that this deity is the *Seidu-aun* of Syria; nor is the conjecture amiss which finds in this compound name a symbolical expression equivalent to—"the opening of the ship of Aun." The relation of this to *O-AUN-nes* and to *Dag-aun* needs no enlargement.

On the whole, our reasonings in proof that the *Hebrew* word *Dag* means a ship, [as the *Chaldee* word *Dag* unquestionably does, as proved in FRAGMENTS, Nos. CXLV. CXLVII. CCXII. also 470, 471, 472. to which remarks the present are in a great degree supplementary] may be thus arranged:

1. *o AN*, or *o AUN*—is the great patriarch himself, who was saved in a ship, or ark, from the Deluge.
2. *o AUN-NES*, is—"the ship of *Aun*, or Noah."
3. *o DAG-AUN* is—"the ship of *Aun*, or Noah, being the same as *o AUN-NES*."
4. *. TZIDE-AUN*—is the ship of *Aun*.
5. *. DAG-AUN* is the ship of *Aun*, being the same as *Tzidé-aun*.
6. *. DAG-oon*—is referred to "a BOAT'S picture" in Asia.
7. *. DAG-aun* is by the LXX. substituted for *Nebo*, who is the productive power, revived from a ship.
8. *. DAG-AUN* is the "*Aun* in a fish:" but "the fish was no real part of him": it was only allegorical.

The word *Aun*, considered separately, may contribute to shew, that precisely the same idea is conveyed by that, as by the issuing of Venus, &c. from the egg. The Hebrew import of this word is exactly, "prolific power;" in this sense its used, *Gen.* xlix. 3. "Reuben thou art my first-born, my might, and the beginning of my—*prolific power*." Also, *Deut.* xxi. 17. "He shall acknowledge the first-born—for he is the beginning of his strength."—See also *Job.* xl. 16. If this appellation then, be taken as signifying a person, we may say on the authority quoted above—*o Aun*, the great Patriarch, taught men husbandry, astronomy, &c. and this we have every reason to believe was fact. We may say—the Ship of the great Patriarch was venerated; and this is equally expressed by either term, *o-Aun-nes*,—*Seidé-aun*, or *Dag-aun*. Or, to take this appellation *impersonally*, we might say, in perfect coincidence with the Gentile mode of expression,—*o Aun*, the prolific power, was worshipped at Babylon; the Ship of the prolific power was commemorated, sometimes under the compound emblem *o Aun-nes*, at other times under that of *tzidé-aun* (Sidon) or of *Po-tzide-aun* or of *Dag-aun*. These inferences are undeniable, on the usual and customary reception of the terms as they stand in the Hebrew language; and in reference only to Hebrew learning; but, as the Hebrew nation is (in the person of its chief ancestor Abraham) a colony from very far East,—from the eastern extremity of the Persian empire, adjacent to India, there can be no impropriety, in enquiring, what information India also affords on this subject; and this the rather, as those from whom we desire this information (the Bramins) are themselves a colony from countries adjacent to the eastern extremity of the Persian empire. In this enquiry Sir WILLIAM JONES furnishes the following testimony.

"... The

" . . . The triple divinity, VISHNUH, SIVA, BRAHMA ; for that is the order in which they are expressed by the letters, A, U, M, which coalesce, and form the mystical word O'M ; a word, which never escapes the lips of a pious *Hindu*, who meditates on it in silence. Whether the Egyptian O N, (which is commonly supposed to mean the sun) be the Sanscrit monosyllable, I leave others to determine." *Asiatic Researches. Calcutta Edit. Vol. I. p. 242.*

Sir WILLIAM'S hint must certainly be taken in the affirmative ; it must be added, that the Hebrew letters M and N are often interchanged in Scripture, as they are closely allied in sound ; and the Hebrew A, U, N, may fairly be taken as parallel to the Sanscrit A, U, M ; which equally with the Hebrew word implies the great progenitor, or progenerative power. Nor should it be forgot, that so early as the days of Joseph, *Gen. xli.* we read of his marrying a daughter of Potipherah, priest of A N, verse 45, [which is the very mode of spelling adopted by Helladius, who reads ó A N ;] while in verse 50 this same name is written at full length A, U, N. These variations prove the little importance of slight differences in spelling this name among Greek writers, when even in Scripture it is thus varied in the same narration. In composition also (*Sidon, Dagon* :) it is varied by omitting the A, no doubt following the general pronunciation ;—*Sid'-un* instead of *Sidé-aun* ;—*Dag'-un* instead of *Dag-aun*. It appears then, that the great progenerative power [or person] is called A U M, in India ; A N, or A U N, in Egypt ; A N, by the Greek writers ; yet nevertheless, under this mutation of letters the appellation is the same, and denotes the same personage :—the most venerable second father of mankind, miraculously preserved from a deluge of waters, by inclosure in an ark, or vessel, or ship ;—a floating habitation.

There were several temples dedicated to AUN in the land of Canaan :—to *Dag-AUN*, *Josh. xv. 41. xix. 27. 1 Sam. v.*—to *Sidé-aun*, *Gen. x. 19. Josh. xi. 8.*—to *Chol-aun*, to *Dib-aun* (and Nebo : So we have in Calmet,—*Beth o-Annaba* ; the temple of o AN-nebo, or Nabá ; " the celestial," says Major WILFORD.) To these may be added *Me-aun*, *Jer. xlviii. 22, 23.* which is taken by the learned Bishop Cumberland for " *Meon*, or *Menes*, with a Greek termination"—rather, *Me-aun-NES*, the *nes*, or *naus* (ship) of AUN [the *Manus*, *M'aunus*, of the Germans, mentioned by Tacitus.] In *Beth-Baal-Meon*, *Josh. xiii. 17.* we have *Baal* connected with *M'aun*. The list might include *Heshbon*, or *Chesheb-aun*, *ibid* ; and many others, as—*Chebir-aun*,—*Ogel-aun*,—*Leshur-aun*,—*Madàun*,—*Shemir-aun*—*Mar-aun*, *Josh. xii. verses 10, 20* : not forgetting *Beth-aun*, or *Beth-el*, where the calves were erected, changed sarcastically by the Jews, in pronunciation to *Beth-aven*.

No. 1. in our Plate represents the allegorical figure of the deity *Vishnuh*, copied from M. LE GENTIL, (*Mem. of French Academy, 1782.*) who received it on the coast of Coromandel, and who observes on it, " In my opinion, it is to be wished, that in the times of the early historians, as Berosus, &c. it had been customary to unite figures to historical narration. It is, I say, desirable, that Berosus had given the figure of *Oannes*, which he says, was preserved at Babylon, and was not lost : perhaps we should find in it a resemblance and conformity to
that

that of the *Vishnuh* of the Bramins. At least it seems to me very probable, that one is traced off from the other, for, if we compare what they relate of the incarnations of *Vishnuh*, with the narration of Berosus and Helladius, every body, I think, must believe that he sees in this figure the image of *Oannes*, whose representation was preserved at Babylon. The Indians gave me this, with others of their divinities, as being the chief of them; it has none of the attributes which appear in those published by father *Kircher*, and in this I think it original, and much more ancient than they are: and likewise more conformable to that which Berosus describes as being extant at Babylon, in his time: for all those attributes seen in the others, such as the book (the *Vedam*) and the ring, in the right hands, the shell in which *Vishnuh* found the book, and the sabre, in the two left hands; are doubtless added afterwards. We ought to remark here, that the *Vedam*, that book so precious (and sacred) to the Indians, teaches them almost all which Berosus says *Oannes* taught the Chaldeans."

No 2. is traced from *Baldeus's* Voyage to India, reprinted in *Churchill's Voyages*, Vol. iii. p. 745. [where those of a like nature published by Mr. Maurice in his "History of Indostan," may be seen, with some slight variations.] It represents the same allegory as that of No. 1. and is the figure referred to by M. LE GENTIL as having the book, (the *Vedam*, or system of laws, moral, political, &c.) and the ring—or regulated connubial intercourse of the sexes; these are in his right hands: in his left hands are the sword—of magistracy and of war,—and the shell, or place of security from punishment and devastation. This figure is evidently a young *man*, a youth prior to the appearance of a beard; which corrects an error in FRAGMENT, No. CXL. &c. where it is considered as female. But though this figure is not female, yet No. 3. is clearly of that sex: and indeed the forms of sex in the figures of antiquity, are very freely interchangeable, and not seldom are monstrously combined, it might be said forced into union.

Observe that No. 1. in our Plate has *two* legs, covered rather with the skins of fishes, than properly those of a fish; one of them has *scales*, like those of a fish; the other has a kind of *stripes*, marking indeed the places where scales might be, but very ill consorting with the fellow leg. It is clear therefore that these two legs could never pass for the extremity of *one* fish:—the body of a fish would be single, not duplicate.—[Is this difference significative of male and female?] Observe what is said by Berosus, "he had human feet, which came out from *each of the two sides of the tail*:" the Babylonish figure then, had *two sides*, like this of M. LE GENTIL; not one fish-like termination, as in Nos. 2, 3. Moreover, in order to render the allegorical *fish* still more evidently allegorical, the Babylonian *Oannes* had *human feet* below the tail of the fish; a circumstance not discovered among the Indian delineations.

No. 3. is copied from an ancient Egyptian zodiac: it may be seen in Mr. MAURICE's "History of Hindostan," Vol. 1. from the Barbarini Museum. Under it is written, "*Ichthon, seu Dagon*." ["The *Fish-Aun*, otherwise *Dag-Aun*,"—in which inscription the terms *fish* and *Dag* are evidently equivalent to each other.] Without scrutinizing the authority for these inscriptions, I agree with

with Mr. MAURICE that this “ exhibits too exact a resemblance of the *Dagon* of Chaldea, and the Indian *Vishnuh*, in the *Matsya* (fish) *Avatar*, to leave a doubt in my mind on the identity of the persons, as well as the mythology . . . the great *Oannes*.” Such are the sentiments of that laborious and well-informed writer.

No. 4. We have seen the relation of a dove and fishes to the parent egg: this is from the *Philosophical Transactions*, Vol. LXIII. p. 346. Mr. SWINTON says of it—“ On one side we discover *Atergatis*, *Adergatis*, or *Derceto*, taken by several learned men, for the *Dagon* of Scripture, nearly as we find that Pagan divinity described by *Diodorus Siculus*, (*Bib. lib. ii.*) and *Lucian*, with a pigeon before her [on her thigh, or knee] and a fish in her right hand. On the other side, we perceive a galley, or small vessel, on the sea, with rowers in it; under which appears a sea horse, or rather a sea monster, of a very particular form. That this silver medal must have been anterior to the dissolution of the Persian empire, we may fairly collect,” &c.—“ That this was struck at Askalon, there is, I think, little reason to doubt.” In the next medal, No. 5, “ brought from Syria . . . *Atergatis* or *Derceto*, holds a *concha marina*, or sea-shell, in her left hand:” which indeed is the same shell as *Vishnuh* holds in his hand in the Indian representation. *Vide* No. 2.

No. 6. The Egyptian zodiac shewed us *Dagon* placed among the signs, with intention of perpetuating his memorial; and the memorial of *Dagon* is really perpetuated, if not now in Egypt, yet certainly in Asia; for among the Burmah constellations, published by Dr. BUCHANAN, *Asiatic Researches*, Vol. VI. p. 196. No. 35. we find a gallant vessel, of considerable size, rising at each end almost to the form of a crescent, with a house, or dwelling, occupying great part (the centre) of it. The explanation of this ship in the Burmah language is, “ The *Brahmen's Buchia* has a *boat's* picture, and [refers to] the *Dagoun* country.” Dr. BUCHANAN adds, “ *Dagoun* is the great temple near Rangoun.” Rangoun is one of the capital cities of the Burmah empire; and this great temple is called *Shoe Dagoun*, or the *golden temple of Dagoun*, great part of its surface being gilt. From this incident I think it possible, that the name as well as worship of *Dagoon* is preserved in the East. The attributing a *ship* to *Dagoon*, and the reference to the *Brahmen*, looks at least as if there were some acknowledged connexion between them.

Fig. 7. on our Plate is copied from an ancient Indian Zodiac, in *Phil. Trans.* for 1772, p. 353. It represents *two* animals, a *goat* and a *fish*: this association is remarkable; because it is precisely a *sword-fish*; and it deserves to be distinguished in illustration of what was formerly hinted at of “ a class of ships, which had long beaks, called by the Greeks *galia*, from *galeopis*, the *Sword-fish*:—they were rowing vessels, of considerable swiftness, and the origin of the modern *gallies*.” *Vide* FRAGMENT, No. CCXV. p. 65. This fish was venerated by the Egyptians under the name of *Oxyrinus*, as Plutarch observes, *acuto rostro*; they considered him as the sign of floods and inundations. This then is, to say the least, a proof of the duplicity of language; the same word denotes the long-beaked *Sword fish*, or the long-beaked galley: but, perhaps,
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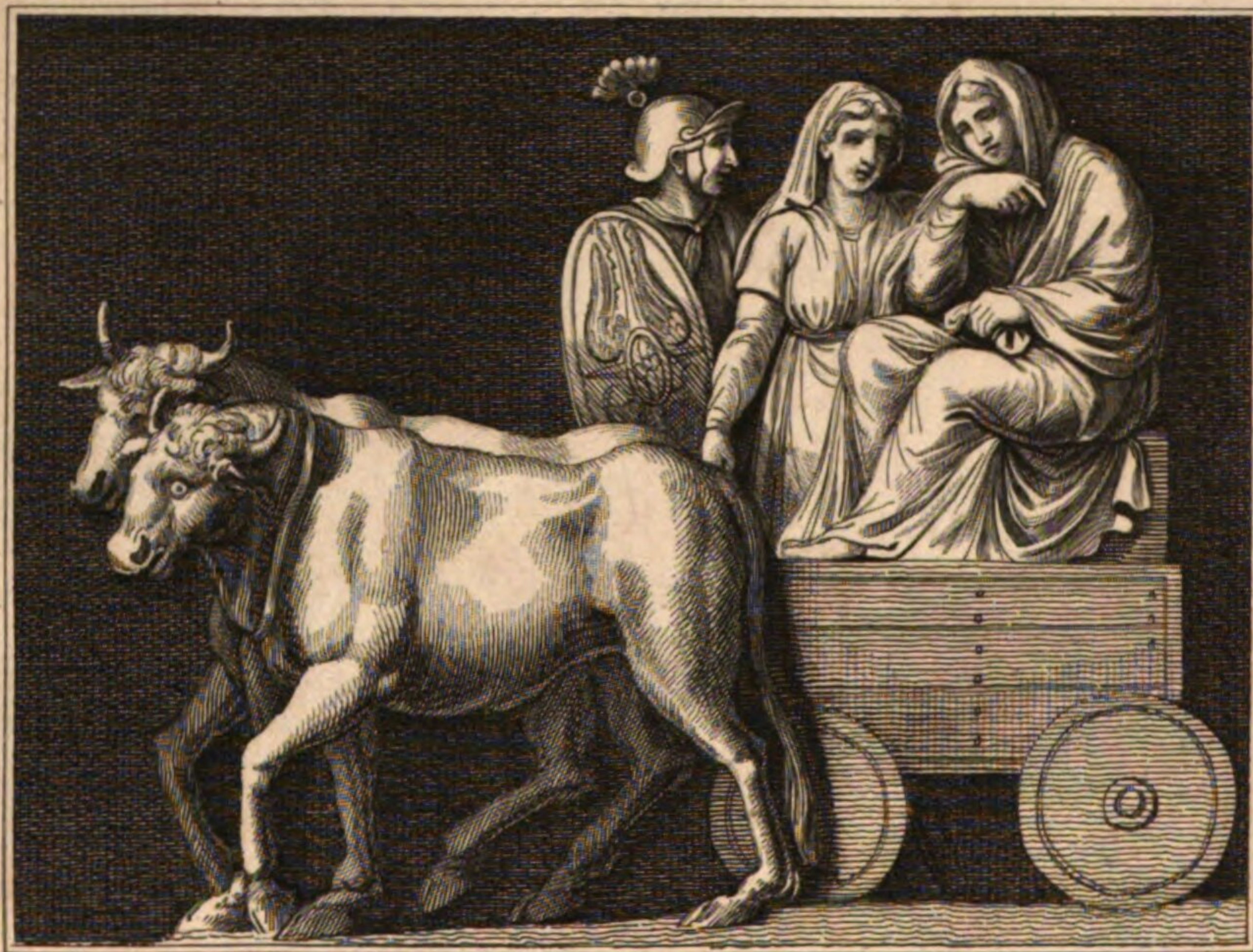
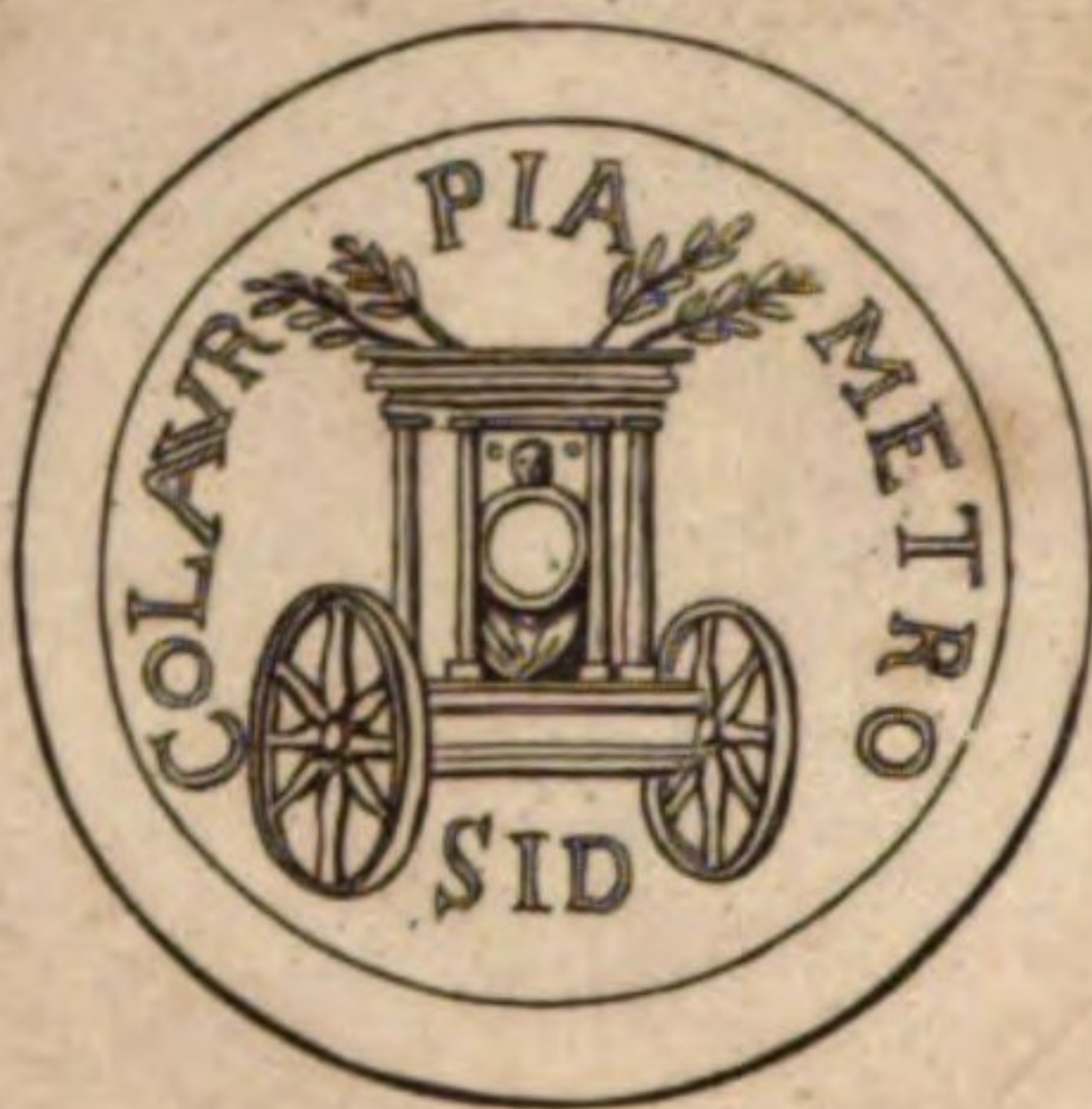
it may imply somewhat more—for how came the idea of this fish to be associated with that of a ship—was it *only* by the coincidence of the beak? In this zodiac this Sword fish and goat compose the sign Capricorn; but in another Indian zodiac, given in the Asiatic Researches, Vol. III. p. 303, *Calcutta Edit.* copied in Fig. 8. we have a fish *discharging* a goat: a very singular combination! the goat is evidently not going into the fish, but coming out of him, for he comes head foremost, holding his head and his horns erect, and seeming to suffer no pain, or distress; indeed, lest we should suppose this incident was any way terrific, the painter has added a couple of ducks, or other water-fowl, reposing in full security close by. This is evidently a large fish; what can it import? Has it been the mean of safety to this goat, during a tempest, and now, the tempest being over, and all calm again, it discharges what it had preserved? If such be its interpretation; this fish also is, though metaphorically, a ship; this is the ark of preservation; and this is the renewal of life; of animal life; a reviviscence, after a state of disappearance and death. N. B. In our present manner of delineating Capricorn on our globes, &c. we omit the *mouth* of the fish; which totally destroys the original idea of the symbol.

No. 8. The idea suggested at the close of No. 7. is not enfeebled by this figure, which is taken from the same Egyptian zodiac as No. 3. It represents the god *Pan* (whose name is inscribed below it) leading the goat, out of what should be the mouth of the fish. “*Pan curat oves oviumque magistros,*” says Virgil.—It were a bold conjecture to consider this sign as marking that month of the year after the deluge, when the animals quitted the ark; under the direction of Heaven and Noah. It is well known that the stars which compose the signs in the heavens, do by no means answer to those signs which refer to them on our globes; but, in order to make the place of the sun correspond to its ancient situation when the signs of the zodiac were first established, not merely many degrees, but considerably more than two whole signs, must be calculated backwards; and this would reduce *Capricorn* from the place of January and December, to that occupied by November and October, in which month (October 27, according to M. Basnage’s Calendar of the year of the Deluge) Noah with his family quitted the ark.

These evidences and reasonings corroborate those formerly given, in proof that Noah was “the Sovereign Prince preserved in the belly of the Fish,” *i. e.* the Ark.

This subject is now left to the reflection of the reader: without designing to influence his opinion unjustly the remark may be pardoned, that perhaps more than could have been expected has been produced in proof that the *Dag* of *Dag-aun*, though symbolically a *fish*, yet referred primarily to a vessel; and so much as goes to support this, goes also to support the secondary sense of the Hebrew word *Dag*, and *Dagah*, that of vessel, or ship: which, as formerly observed, has its aspect not merely on the *Dag* of *Aun* (*Noah*) but on the *Dag* of *Jonah* also, and on his miraculous preservation by it.

* * * Compare the Medals of Corinth: Plate in “Sacred Geography.”





DISTINCTIONS OF EASTERN CHARIOTS.

I. SAMUEL, CHAPTER VI. VERSE 7.

ON Isaiah chapter xxi. 7. the reader may see descriptions of some of those vehicles for riding in; which our translation renders *chariots*; to which article we beg leave to refer.

The history of conveyance by means of vehicles, carried or drawn, is too extensive a subject for us to undertake to treat of, fully.—There can be no doubt, that after man had accustomed cattle to submit to the conduct of a rider, and to support the incumbent weight of a person, or persons, whether the animal were ox, camel, or horse; that the next step was to load such a creature, properly trained, with a litter, or portable conveyance; balanced perhaps, on each side, like that shewn on the Plate, Genesis xxxi, 34. This might be long before the mechanism of the wheel was employed: as it is still practised among pastoral people. Nevertheless, we find that wheel-carriages are of great antiquity; for we read of them so early as Exodus xiv. 25. “The Lord took off the chariot *wheels* of the Egyptians;” and, as these were military chariots, and the fighting strength of Egypt, this agrees with those ancient writers, who tell us, that Egypt was not, in its early state, intersected by canals, as in later ages; after the formation of which, wheeled carriages were laid aside, and little used, if at all.

The first mention of Chariots, I believe, occurs Genesis xli. 43. “Pharoah caused Joseph to ride (*recub*) in the second chariot (*marecabeth*) that belonged to him.” This, very likely, was a chariot of state; not an ordinary, or travelling, but a handsome equipage; an equipage becoming the representative of the monarch’s person and power.

We find also, in chapter xlv. 19. that Egypt had another kind of wheel-carriages, more adapted to the conveyance of burdens; “take out of the land of Egypt (*עגלות* *ogeluth*) waggons, wheel-carriages, for your little ones, and your women, to be conveyed in;—so then, these *ogeluth* were not military, but family vehicles, for the use of the feeble; including, if need be, Jacob himself: accordingly, we read, verse 27, of the waggons which Joseph had sent to carry him (Jacob,) and which perhaps Jacob knew by their construction to be Egypt-built; for, so soon as he sees them, he believes the reports from that country, though he had doubted of them before, when delivered to him by his sons.

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This kind of chariot will engage our attention, as we find it afterwards employed on various occasions in Scripture, among which are the following: *first*, it was intended by the princes of Israel for carrying parts of the sacred utensils; Numb. vii. 3. "They brought their offering—six covered waggons (*ogeluth*) and twelve oxen;"—here, these waggons are expressly said to be covered; and it should appear, that they were always capable of being covered; beyond question those sent by Joseph for the women of Jacob's family were so; among other purposes for that of seclusion. Perhaps, even this may be a radical idea in their name; as *gal* signifies a *circle*, and these waggons might be covered by circular headings, spread on hoops, like those of our own waggons; which kind of covering we call a *tilt*.

This statement has considerable importance in the history of the curiosity of the men of Bethshemesh, 1 Sam. vi. 7. where it is recorded that the Philistines advised to *make a new* covered waggon, or *cart* (*ogeleh*):—this was done accordingly:—and the Ark of the Lord was put into it,—and, no doubt, carefully covered over—concealed—secluded—by those who sent it;—it came to Bethshemesh; and the men of that town, who were reaping in the fields—perceiving the cart coming, went and examined what it contained: "and they saw the **VERY** (אֵל) Ark, and "were joyful in seeing it." Those who first examined it, instead of carefully covering it up again, as a sacred utensil; suffered it to be open to common inspection, which they encouraged, in order to triumph in the votive offerings it had acquired, and to gratify profane curiosity;—the Lord therefore punished the people, verse 19, "because they had inspected—*pried* INTO (ב) the Ark." This affords a clear view of the transgression of these Israelites; who had treated the Ark with less reverence than the Philistines themselves; for those heathen conquerors had at least, behaved to Jehovah with equal respect as they did to their own deities; and being accustomed to carry *them* in covered waggons for privacy, they maintained the same privacy, as a mark of honour to the God of Israel. The Levites seem to have been still more culpable than the common people; as they ought to have known the law, and not to have suffered their triumph on this victorious occasion to mislead them to the commission of a transgression so contrary to the law, and institution of the Theocracy.

That this word *ogeleh* describes a *covered* waggon, appears by a third instance, that of Uzzah, 2 Sam. vi. 3. for we cannot suppose, that David would so far forget the dignity of the Ark of the Covenant, as to suffer it to be carried exposed, in a public procession, to the eyes of all Israel; especially after the punishment of the Bethshemites. "They carried the Ark of God on a new *ogeleh*—"covered cart"—and Uzzah put forth [his hand, or some catching instrument] to the Ark of God, and laid hold of it, to stop its advancing any further, but the oxen harnessed to the cart, going on, they drew the

the cart away from the Ark, and the whole weight of the Ark falling out of the cart, unexpectedly, on Uzzah, crushed him to death—"and he died on the spot, with the Ark of God" upon him. And David called the place "the Breach of Uzzah"—i. e. where Uzzah was *broken*—crushed to death.

See now the proportionate severity of the punishments attending profanation of the Ark—1. the Philistines suffered by diseases, from which they were relieved after their oblations.—2. the Bethshemites also suffered, but not fatally, by diseases of a different nature, which, after a time, passed off. These were inadvertencies: but, 3. Uzzah, who ought to have known better, who conducted the procession, who was himself a Levite,—this man was punished fatally, for his disobedience,—his inattention to the law; which expressly directed, that the Ark should be carried on the shoulders of the priests, the Kohathites, Numb. iv. 4, 19, 20, distinct from those things carried in *ogeluth*,—covered waggons, chap. vii. 9.

That this kind of waggon was used for carrying considerable weights, and even cumbersome goods, (therefore fairly analogous to our own waggons—tilted waggons) we learn from the expression of the Psalmist, xlv. 9.

He maketh wars to cease to the end of the earth;
The bow he breaketh; and cutteth asunder the spear;
The Chariot (*ogeluth*) he burneth in the fire.

The writer is mentioning the instruments of war—the bow—the spear—then, he says, the waggons (for the word is plural) which are used to return home loaded with plunder, these share the fate of their fellows, the bow and spear; and these are burned in the fire—the very idea of the classic allegory, Peace burning the implements of war!—and introduced here with the happiest effect: not the general's *Marecabeth*; but the *plundering* waggons. This is still more expressive if these waggons carried *captives*: which we know they did in other instances; women and children. "The captive-carrying waggon is burnt." There can be no stronger description of the effect of peace, and it closes the period with emphasis.

Having thus shewn the antiquity and use of covered waggons, which in most of the instances adverted to were drawn by oxen, perhaps indeed, in all: we proceed to notice chariots of equal antiquity, but of different use, and which appear to establish a distinction among these, as we find two names employed to describe them: 1. the *RE CAB*, 2. the *MARECABEH*: the latter evidently a derivative from the former. The first may be supposed to be the inferior, and drawn by two horses, only; the second probably was the superior, and drawn by four horses.

We have already observed, that Joseph rode in the second state chariot—*Marecabe*—of Pharaoh's kingdom:—that this was a handsome equipage, need not be doubted; that it was a public vehicle, appears from the proclamation,

mation, &c. attending the officer who rode in it. Joseph also, when going to meet his father, rode as Vizier—and used his *marecabe*. We find also that Sisera, when expected to make his triumphant entry, was equally expected to ride in such a chariot; for his mother says, “why tarry the wheels of his *marecaboth*?” Judg. v. 28. This vehicle he had also used in battle, chap. iv. 15.

Perhaps this idea adds a spirit to the history of Naaman, 2 Kings v. 9. Naaman came to the prophet Elisha, with his horse and attendants, a great retinue; but, being in a state of disease, he was himself in a humble *recab*; being a leper he was secluded; not so, when he went away healed; then in a state of triumph, he rode in his *marecabe*: for so says verse 21, he alighted from his *marecabeth* to meet Gehazi: vide also verse 26. This kind of chariot was not forgot by the ambitious Absalom, among his preparations for assuming the state of royalty, 2 Sam. xv. 1. and, that the *marecabe* was a chariot of triumph, or of magnificence, is decided by a passage of the prophet Isaiah, chap. xxii. 18. “the chariots—*marecaboth*—OF THY GLORY shall be the shame of thy Lord’s house.” See also 1 Kings xii. 18. xx. 33. 2 Kings ix. 27.

It may further be observed, that these *marecaboths* were used in battle, by kings, and by general officers; so we read 2 Chron. xxxv. 24. that king Josiah was mortally wounded in battle; his servants therefore took him out of that *marecabe* which he had used as commander against Pharaoh Necho, and put him into a second *recab*, which belonged to him, to convey him to Jerusalem. The same is related of Ahab, 1 Kings xxii. 35. And the king, who was disguised as an officer, was stayed up in his *marecabe* against Syria; but died in the evening. And the blood from his wound ran into the bosom-BED of his *recab*. That is to say, Ahab had been removed, like Josiah, from a chariot of dignity to a common litter (for such I suppose was the *recab*, here) for the more easy and private carriage of his body now dead; and the blood from his wound ran into this vehicle,—which therefore was washed in the pool of Samaria, verse 38. and thus his blood fulfilled the Prophet’s prediction.

That the *marecabe* was drawn by four horses, appears evident from the calculation, 1 Kings x. 28. *a chariot*—meaning a chariot set of horses—*came up out of Egypt, for six hundred shekels; being one hundred and fifty shekels for each horse*;—four: and that the word *chariot*, means the horses that drew the vehicle, appears from 2 Sam. viii. 4. “and David houghed all the chariot horses; but reserved to himself an hundred chariot horses:” here the *horses* must be the subjects of this operation, not the chariots; and so the passage is always understood, though the word *chariot* only is used.

It is not easy to determine when the word *recab* means a wheeled chariot, drawn by two horses, or when it means a *litter*, carried by two horses: this is of small consequence: as we may rationally conclude, that chariots with two horses were used earlier than those with four; the second pair being an addition for greater pomp and dignity, &c. Perhaps,

Perhaps, the following may afford some hints on the subject of chariots drawn by *two* horses. 2 Kings ii. 11. "There appeared to the prophet Elisha a *recab*—chariot—of fire, and horses, *i. e.* *two* horses of 'fire.'" Psalm lxxvi. 6. "in a dead sleep are both *recab*—chariot and *horse*:"—if this be a *single* horse, it must needs be a *wheeled* chariot; which he *draws*; not a litter. Isaiah xliii. 17. "who bringeth forth *recab*—chariot, and *horse*," (singular). 2 Kings vii. 13, 14. "take I pray thee *five* [it should be—a party—a SET, vide FRAGMENT No. I. page 3.] of the horses which remain:—they took therefore *two* *recab*—chariot-horses"—*i. e.* the proper number for a *recab*: and, that the rendering *five* is here improper, is evident, because *two* was all that were sent, yet this was clearly according to the proposal, and fully as much to the purpose as *five*; what use has the mention of *five* if only *two* were sent?

These passages may serve to establish a distinction between *recab*—the chariot drawn by *two* horses, the humble *biga* of the classic authors: and the *marecabe*—chariot drawn by *four* horses; the *quadriga*. The word *recab*—riding—is of such general import in Scripture, that the difficulty is, to determine when any particular species of riding is intended by it. Very little attention, or rather none at all, has been paid to this, in translation: yet that it is necessary to correctness the foregoing remarks sufficiently determine, and perhaps, may afford some hints for direction in determination.

EXPLANATION OF THE PLATE.

In vindication of the idea that the Philistines treated the Ark of the Lord as they were accustomed to treat their own deities, I submit No. 1. A medal of Sidon, in which we see distinctly the deity, *Luna*, *Astarta* or *Ashtaro*th—the Moon—known by the crescent, adorned with strings of pearls, and other ornaments, sitting in a *covered waggon*, *i. e.* a waggon having a canopy, supported by four pillars, around which the curtains for enclosure, might be hung; but these are removed by the medallist, in order to shew the figure of the goddess: for indeed, if they were close-drawn, the divinity within, to whom the vehicle is sacred, could not be distinguished. It is clear, however, from this medal, that the Sidonians in their processions, carried *Ashtaro*th in a *covered waggon*.

No. 2. Another medal of the Sidonians; in which the *covered waggon* is shewn, compleatly, with its canopy, adorned with branches.

Remark, 1. that the wheels of both these carriages are not *solid*, but have spokes: 2. that only *two* wheels appear to each carriage.

No. 3. A Roman medal, shewing how greatly this kind of carriage was ornamented on some occasions. The use of such equipages was granted as a privilege, to the empresses, and to deities; and this medal shews, that *Agrippina* had received, after her death, a kind of consecration; such honour being implied in the use of the *Carpentum*. That this was bestowed after death,

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we have many instances, as *Julia Augusta*, *Domitilla*, and others. This carriage has only two wheels; it is drawn by mules. It shews a vehicle of this kind, completely closed up; so that the person carried in it is unseen.

No. 4. A single-horse chaise, from an ancient monument; given in order to shew, that what we have hinted of single-horse chariots, in the prophets, is not impossible: [though probably the words "horse and chariot"—are to be taken generally, not particularly, in those passages.]

No. 5. As we have attributed the office of conveying prisoners to the *ogeleh*, or waggon, we have copied from the Antonine Column a carriage of this kind, drawn, like other *ogeluth*, by oxen; with a female prisoner of distinction, the mother of Tiberius, sitting in it. We are not to suppose, that all female prisoners were thus indulged; nor are we to conceive of this kind of waggon as no larger than that before us; but, occasionally, of any magnitude required. This vehicle has four wheels; wherein it differs from others on our plate. There are several of these four-wheeled carriages heavily laden, on the Antonine Column.

No. 6. A coin of a Persian king, but struck in Palestine, [probably, at Sidon, by Artaxerxes Ochus] it represents the king in a car, drawn by two horses; whether this is a *triumphal car*, I presume not to determine, but I think, that,

No. 7. Being a car drawn by FOUR horses, is certainly a car of triumph, for the monarch is driven by a person who is directing the reins of the horses; and is followed by another, who holds up in one hand, what is probably a kind of horse tail, such as is seen in the ruins of the palace of Persepolis, where it occurs as an attendant on royalty.

This coin deserves special notice: the Phenecian letters on it, *o r c*, denote that it was struck at *Arca*, a city of Phenecia, between Byblus and Heliopolis. There can be no doubt but what it represents correctly the car of the Persian monarch. Having four horses, may it be considered as the *marecabe* of the East; and therefore of the kings, &c. mentioned in Scripture? Observe 1. the driver of it is not the king himself, but an attendant: So we read, 1 Kings xxii. 35. Ahab said to his charioteer—the driver of his *marecabe*—"turn thine hand, for I am wounded." This driver is called *recab*; and so we read, Haggai ii. 22. I will overthrow the *marecabe*—the state chariots, and those who conduct them—(*recabi* רכבי). This gives a different idea, to the exclamation of Elisha; when losing Elijah, 2 Kings ii. 12, "My father! My father! the *recab*—conductor of Israel, as of a chariot, and of his horsemen!" One who has had [*under the king*] as much solicitude for the guidance of Israel, as the driver of a chariot has for the safe conduct of his vehicle, in which a monarch is seated.

This is analagous to the notion of *Philo Judeus* (*de Profug.*) respecting the
LOGOS.

LOGOS. Speaking of the cherubim on the mercy seat, he says, "the Divine WORD is above these; of whom we can have no idea by the sight, or by any other sense; He being himself the *Image of God*, the eldest of all intelligible beings, *sitting nearest to him who is truly THE ONLY ONE, there being no distance between them*: and therefore, he (God) says, *I will speak unto thee from the mercy seat, between the two Cherubim*; thereby representing the LOGOS as the charioteer by whom the motion of these powers is directed, and himself, who speaks to him, as the person carried, who commands the charioteer how he is to manage the reins."

On the strength of this passage, partly, and, as illustrated by our medal, may we venture to determine the vision of the cherubim, in Ezekiel, chap. i. to be that of the chariot of Deity: of prodigious height and magnitude! And that the four cherubim, like the four horses in this car, stood *together*, not one on each side; as formerly enquired [FRAGMENT No. CLII.] Now, as we know that Ezekiel lived in Persia, and as we find the figure of the Cherub still extant in Persia, these ideas connected, afford proof, that however sublime and poetical the prophet's description may be, yet to its original readers it had not that obscurity, which has embarrassed western interpreters,—almost beyond illustration.

We might confirm the foregoing statement by appeals to classic authors: but, shall only remind the reader, that the chariots in Homer have constantly these two persons, the driver, and the warrior: "one of these was called *Heniochos*, because he *governed the reins*, which in those days was not a servile or ignoble office, but frequently undertaken by men of quality; for we find *Nestor*, though a king, also *Hector*, and several others of dignity, employed in it; and that, not on extraordinary occasions, but frequently, some of them even, constantly. Moreover, that the war chariots though usually drawn by two horses, sometimes had four, appears from the speech of *Hector*, *Iliad* viii. to *Xanthe*, *Podarge*, *Aithon*, and *Lampe*, his horses; Homer also compares the swiftness of the Pheacian ship to that of a chariot drawn by four horses. *Odyss.* xiii.

The reverse of this medal, shews a capital galley, with a tutelar deity in front, to protect the vessel from danger. [Vide FRAGMENT. *Ship of Tyre*, No. CCXVII. p. 77.]

Nos. 8, 9. Are triumphal cars of Roman emperors, drawn by four horses each. The reader will observe, that whereas the car of the Persian king, in the former number, was *square*, these are *round*, in front, especially. They are open at the end: and they have only two wheels.

It seems remarkable enough, that no *side traces* to the horses occur in antiquity: we should think we lost at least half the strength of the horses, by such

such omission. The same omission occurs in the Persian vehicle. Perhaps in chariots of state this loss was disregarded.

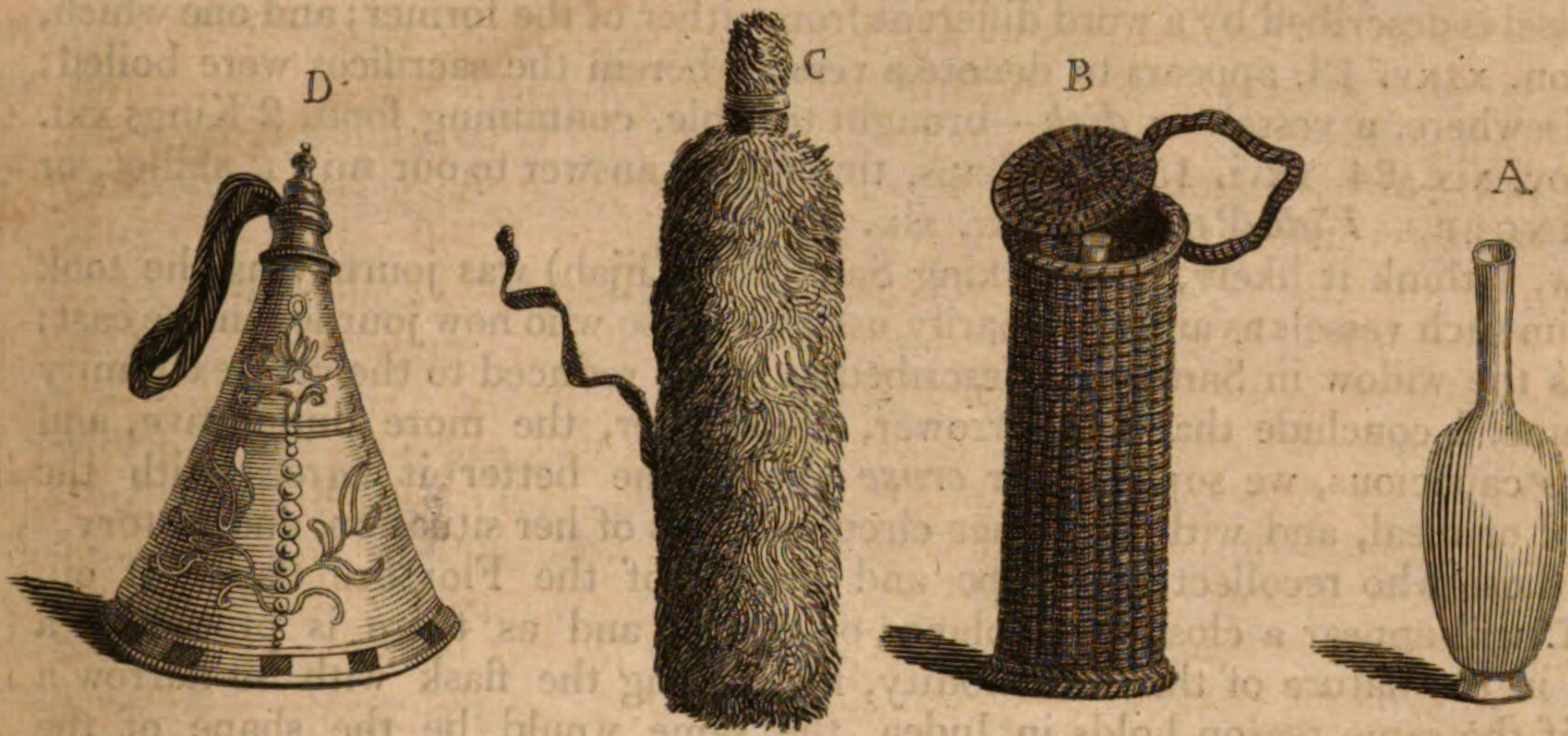
A passage in the second part of Dr. Clarke's *Travels in Greece, Egypt, &c.* throws additional light on the construction of the Ancient Chariot. That traveller says, p. 112.—“The women of the place (the hot springs, at Bournabashi) bring all their garments to be washed in these springs, not according to the casual visits of ordinary industry, but as an antient and established custom, in the exercise of which they proceed with all the pomp and songs of a public ceremony. The remains of customs belonging to the most remote ages are discernible in the shape and construction of the wicker cars, in which the linen is brought upon these occasions, and which are used all over this country. In the first view of them, I recognised the form of an antient car, of Grecian sculpture, in the Vatican Collection at Rome; and which, although of Parian Marble, had been carved to resemble wicker work: while its wheels were an imitation of those solid circular planes of timber used at this day, in Troas, and in many parts of Macedonia, and Greece, for the cars of the country. They are expressly described by Homer, in the mention of Priam's litter, when the king commands his sons to bind on the chest or coffer, which was of wicker work, upon the body of the carriage. *Iliad* xxiv. This wicker chest, being moveable, is used or not, as circumstances may require.”

The passage is erroneously and imperfectly rendered by Pope; who, not having the advantage of translating Homer *in Asia*, as he wished, could do no better.

The sons their father's wretched age revere,
 Forgive his anger, and produce the car.
 High on the *seat* the *cabinet* they bind:
 The new made car, with solid beauty shin'd;
 Box was the yoke, emboss'd with costly pains,
 And hung with ringlets to receive the reins;
 Nine cubits long, the traces swept the ground;
 These to the chariot's polished pole they bound,
 Then fixed a ring the running reins to guide,
 And close beneath the gathered ends were ty'd.——
 But the fair horses, long his darling care,
 Himself received, and harnessed to the car.

The *seat* of Pope, is the “body of the carriage” of Dr. Clarke; and his “*cabinet*” is the wicker “chest, or coffer,” that was *bound* on the body.

Does this give a new aspect to the command given by Joram, 2 Kings ix. 21? “And Joram said, *Make ready*”—literally BIND: and his chariot was *made ready*,” literally, BOUND: *i. e.* not meaning perhaps, “bind the horses to the chariot;”—but, bind the *body of the chariot* on to its carriage. This chariot was a *recab*. It is possible, that other allusions to the chariot in both its states, of mounted, and dismounted, may occur, in various parts of Scripture; but, none, probably, to which the distinctions we have stated, do not apply.



CRUSE (q. CREUSE, *Hollow*: Fr.?) OF WATER.

I SAMUEL XXVI. 11.

OUR translators have rendered by the word *cruse*, no less than three words, which are offered by the Hebrew; and which, no doubt, describe different utensils; though perhaps, all may be taken as vessels for the purpose of containing liquid.

The first occurs 1 Sam. xxvi. 11. David, when in Saul's tent, would not smite him; but carried off his spear, and (צפחה המים, *TJEPECHAT HEIAMIM*) his *cruse* of water. That this was a small vessel, not a capacious cistern, is evident; that it was also a *personal* appendage to Saul, in some respects, appears from its being readily recognized as belonging to him. Probably as his spear was *royal*, so was this water-vessel. However, certainly it was not large.

We read also, 1 Kings xiv. 3. "take in thy hands . . . a *cruse* of honey:" but here the word is different (בקבוק רבש, *BAKBAK DEBASH*) because, honey not being, by a great deal, so fluid as water, a different vessel might contain and carry it; this should, perhaps, be rendered *jar*; or *pot* of honey.

In 1 Kings xvii. 12. the widow said to Elijah, "I have but a little oil in a *cruse*"—in a *tjepechat*, the same word as in Samuel: so that the *tjepechat* was used for holding either oil, or water. At the head of Elijah lying in the wilderness, stood—a *tjepechat*, *cruse*, of water. 1 Kings xix. 6.

1 SAM. xxvi. 11.

In

In 2 Kings ii. 20. Elisha says, "Bring me a new *cruse*" (זֵלֶכֶחַ TJELECHIT); this vessel is described by a word different from either of the former; and one which, 2 Chron. xxxv. 13. appears to denote a vessel wherein the sacrifices were boiled; but, elsewhere, a vessel—a *dish*—brought to table, containing food, 2 Kings xxi. 13. Prov. xix. 24. xxvi. 15. Perhaps, this might answer to our BOWL, skillet, or PORRINGER. *Vide* PLATE, Prov. xix. 24.

Now, I think it likely, that as king Saul (like Elijah) was journeying, he took with him such vessels as are customarily used by those who now journey in the east; and, as the widow in Sarepta is described as being reduced to the very extremity of famine, I conclude that the narrower, the smaller, the more diminutive, and the less capacious, we suppose her *cruse* to be, the better it agrees with the handful of meal, and with the other circumstances of her situation, and history.

To those who recollect the shape and nature of the Florence flasks of oil, Fig. A. will appear a close resemblance of them; and as there is probably, a reason in the nature of that commodity, for making the flask with so narrow a neck, if the same reason holds in Judea, the same would be the shape of the Jewish flasks: moreover, as this is the shape of the water flasks now used by travellers in the East, I think this may well represent the ancient *tjepechat*, which our translators have rendered *cruse*. The reader will observe the wicker case to this flask, which, I suppose, in the instance of king Saul, was of superior materials, or was more ornamented than usual, by way of denoting its employment by a royal personage. But, as it is possible, Saul's *cruse* might be of another shape, (though I think the above more likely) I have given a vessel differently shaped, which likewise is used by travellers in the East, to contain water for personal accommodation, Fig. D. The ornaments on this vessel might easily be rendered royal, and even superb.

EXPLANATION OF THE FIGURES.

"If they go long journeys they have such vessels for containing water as Fig. C. which they use in the journey to Mecca. Great people have a servant who carries such a vase of water as Fig. A. in a basket made of wicker-work, Fig. B., to be ready whenever water is wanted."

"D is a bottle of leather, which they hang on the side of their camels, or it is carried by a servant, to drink out of when they travel. They are of a workmanship they much excel in at Constantinople, and are often adorned with flowers, made with a sort of very fine brass wire. They take out the large stopper, to put in the water, at the top of which, there is a small hole with a peg in it, out of which they drink." Pococke's *Travels in Egypt*, Vol. I. p. 186.



EASTERN ATTITUDES of WORSHIP.

ATTITUDES OF DEVOTION IN THE EAST.

2 SAMUEL, chap. viii. verse 17.

THIS is one of those Plates which cannot be dispensed with in a work like the present, yet which is rather useful in its application to Scripture in general, than to any specific passage of Holy Writ.

A. Is an action of entreaty, if addressed to God; or of blessing, if addressed to man: *i. e.* of beseeching God to confer his blessing, on the party in behalf of whom it is solicited.

B. Is one of those attitudes which servants in the East assume, when in the presence of their superiors; the hands folded across, and the head down-looking, are indications of great respect and humility.

C. Is a manner of abstracting the party's self from surrounding objects; while mental meditation occupies his whole attention.

D. Is a kind of meditation, during which the party repeats his prayers: and only uses his raised hands in order to keep his attention from wandering.

E. Is a profound prostration, expressive of the deepest respect and veneration.

F. Holds a string of beads in his hand; of which he slips one through his fingers, at each of his ejaculations, or at each repetition of the name of God, or ending of a prayer, &c. The beads assist him in computing and marking the number of such devotions.

G. Covers his face with his hands; in order to concenter more efficaciously his thoughts and ideas: that no external objects may call off his attention from the subject which occupies his mind.

H. Resembles D in his attitude, as sitting on his heels. This attitude is assumed by servants while waiting on their masters. In this manner they attend and watch every motion of the hand of their superior, for the purpose of receiving orders, &c. which are often given by an almost imperceptible sign made by the fingers, or hand; of which the different actions and positions answer almost all the purposes of vocal language.

I. Is a kneeling attitude; one hand laid on the breast, expressing resignation, &c.; the intention of which is very evident, because it is at once affecting and natural.

Mr. HARMER thinks that figure H. may explain the action of David, 2 Sam. vii. 18. who after having received a distinguishing promise from God, went in and *sat* before the Lord: by way of gratefully returning thanks to him for this promise. "Abarbanel, and some Christian expositors, seem to be perplexed about the word *sitting*; but sitting, after this manner, was expressive of the greatest humiliation, and therefore was no improper posture for one who appeared before the ark of God."

Edit. 2.

2 Sam. viii. 17.

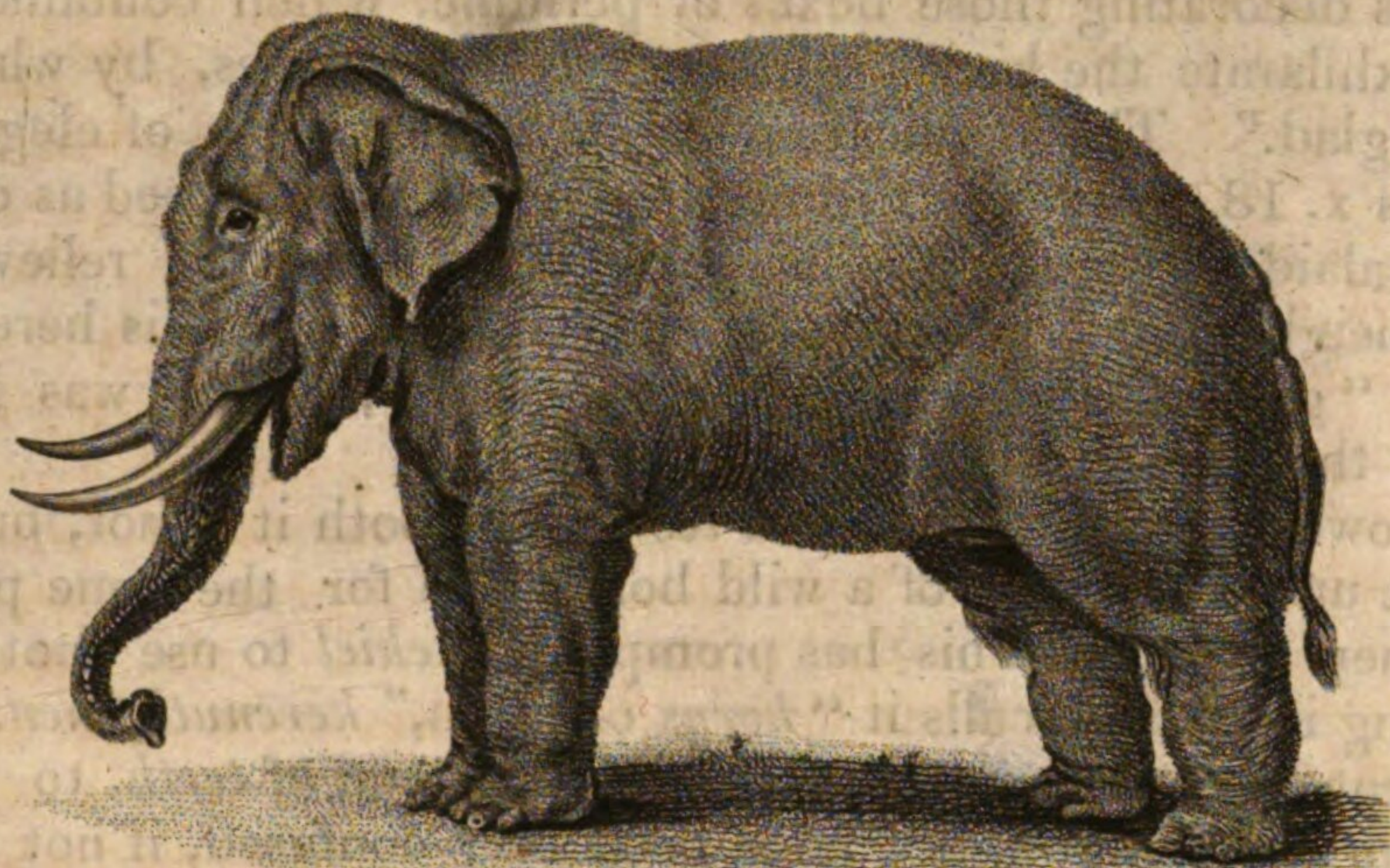
Certainly,

Certainly, I apprehend this *sitting* was an attitude of worship; nevertheless conjecture may refer this action to David's sitting on his throne, as at public worship; for such is the usual acceptation of the word used: as Psalm i. 1, he doth not *sit in the seat* of the scornful. 1 Sam. i. 19, Eli *sat on a seat*. 1 Sam. xx. 25, the king *sat on his seat* by the wall. If this word then describe sitting *on a seat*, we might be justified in doubting, whether it denotes expressly the attitude of our figure, how proper soever this attitude might be. If we add to these hints, the recollection that Naboth was caused to sit on high—Heb. “*at the head* of the people,” perhaps we shall find no impropriety in supposing that David, as king, made a public acknowledgement, or returned thanks openly, for this favour; that, as it was in fact a national concern, he was not satisfied with private gratitude, but proclaimed the favour done him, in a manner more noticeable than his ordinary course of worship. This is only conjecture; and merely intended in proof, that the word used in the history, is not decisive for this humbler manner of sitting: which, notwithstanding, may be the correct view of the passage.

It might contribute to our better understanding of this subject, if we knew to what place king David *went in* for the purpose of sitting before the Lord. It was at a time when David said, “I dwell in a house of cedar, but the ark of God dwelleth within curtains.” It was when “David *sat* (the same word as in the verse before us) in his house”—palace, yet the tabernacle was the place of national worship and service, the especial presence of God. Certainly, David did not *go in* to the holy place before the ark; nor to the exterior sanctuary; because, the first was peculiar to the high priest, in the performance of his sacred office, annually; the other to the proper priests, in the course of their daily duty; I presume, he even did not *go in* to the court of the priests, wherein stood the altar, because, all lay-men were excluded from thence: but if he occupied his usual station of worship, what was analogous to the royal throne of Solomon, the MUSACH of after ages, then the inference to be deduced would greatly favour our conjecture, that some *observable* act of public worship of a humble and unassuming nature, intended as a testimony of gratitude, is implied in the expression of *sitting*—sitting before the Lord. *Vide* in CALMET the article MUSACH, and FRAGMENT, No. CCXLII. page 145.

The manners of our nation, are so different from those of the east, that what was, and is, of ordinary usage there, would appear extremely unbecoming among us. When the apostle Paul, 1 Cor. xiv. 25. alludes to a stranger, present in a Christian assembly, “*falling down on his face* as an act of profound reverence, and worship, to God”—he supposes an occurrence, which, though not the usual expression of respect, was nevertheless, not unknown, or uncommon among those to whom his Epistle was addressed. But how would such a sight surprize, and even alarm, a British congregation! Our figure E. shews that this is one of the attitudes adopted in Eastern worship.

The original word used in this passage imports to *crouch* as a dog does at the feet of his master: and though it implies *profound* reverence, yet it does not of itself determine whether such reverence be civil, or sacred.



THE ELEPHANT.

WE have two reasons for introducing the Elephant in this work; the first is, that many persons, among whom CALMET is included, consider this animal as the *Behemoth* of Job xl. The second is, that his most valued production, Ivory, is denoted in scripture under a *periphrasis*, which, to be justified, requires an appeal to his figure.

As to the first particular, it must be acknowledged, that the Elephant is sufficiently large to be included among the *Behemah*, or quadrupeds of great magnitude, which form a division in Hebrew zoology. We must admit his strength, as well as his magnitude, his feeding on vegetables, and many other particulars, common to him with the *Hippopotamos*; yet, there are some particulars which agree better with this last mentioned animal, and we can by no means remove the difficulty that arises from the natural *companionship* of the Hippopotamos with the Crocodile; which we suppose is certainly the *Leviathan*. This association struck *Pliny* long ago, who says, *lib. xxviii. cap. 8.* "There is a certain relation between the Crocodile and the *Hippopotamos*, who live and who feed in the same river." BOCHART observes further, that words ending in *oth* are Egyptian; as *Tóth*, *Phaóth*, *Phamenóth*, &c. not being plurals, but singulars. The word *behemoth* agrees with this remark, and seems to be so applied *par excellence*. The word *behemah* is used by the Arabs of the present day, as the word *behemah* was used anciently by the Hebrews, to denote *large* beasts.

But the Elephant undoubtedly yielded *Ivory*. The first time this is mentioned in Scripture, is in the reign of Solomon. If the forty-fifth Psalm were written *before* the Canticles, and *before* Solomon had constructed his royal and magnificent throne, then *that* is the first mention of this commodity. It is

spoken of as decorating those boxes of perfume, which contained odours employed to exhilarate the king's spirits: "*Ivory* palaces, by which they have made thee glad." The application of it as an article of elegance appears, also 1 Kings x. 18. where the throne of Solomon is described as decorated with ivory, and inlaid with gold: the beauty of these materials, relieving the splendour, and heightening the lustre of each other. Ivory is here, described as *shen gedul*, "great tooth"—which shews clearly, that it was imported into Palestine in the whole tusk.

It was, however, illi described as a *tooth*; for tooth it is not, but a weapon of defence, not unlike the *tusk* of a wild boar; and for the same purposes as the *horns* of other animals. This has prompted *Ezekiel* to use another *periphrasis* for describing it; and he calls it "*horns of tooth*," *kerenuth shen*. This, too, is liable to great objection, since the idea of *horns* and of *teeth*, to those who had never seen an Elephant—must have been very confused, if not contradictory. Nevertheless, the combination is ingenious; for, the *defences* which furnish the ivory, answer the purposes of *horns*; while, by issuing from the mouth, they are not unaptly likened to teeth: and they are still called "teeth" among our dealers, who know perfectly well that the Elephant has *teeth*, expressly formed for mastication of food; grinders of no trifling weight and dimensions. *Bochart* was desirous of finding Elephants themselves in Scripture, and inclined to read 1 Kings x. 22. *shen-kahabim* instead of *shen-habbim*. This is much better broken into two words, *shen*, tooth, and *habenim*, ebony wood; for which we have the authority of Ezek. xxvii. 15. As to *beds*, and *houses* of ivory, they can only mean *adorned*, not *constructed* of ivory: vide on Esther i. 6. From Ezek. xxvii. 6. *Benches made for the rowers of the Tyrian ship made of—ivory, the daughter of steps*—we have dismissed the *ivory* altogether, in FRAGMENT, No. ccxvii. p. 78. Indeed *ivory* in every state is unfit for any use requiring firmness; surely much more for such a situation as seats for rowers, which must require all the strength, resistance, and durability of oak itself.

By considering the figure we perceive clearly, what induced the Hebrews to describe the tusks as *teeth*; i. e. their projection from the mouth, where *teeth* are naturally expected: while, at the same time, they have much the character and uses of *horns*, being evidently capable of making a stout resistance, if the creature be attacked, and of being used as most formidable and deadly weapons.

If we might trust to the *Chaldee* interpreter, the knowledge of *ivory* would prove much more antient than it appears in Scripture; for, this authority informs us, that Joseph placed his father Jacob "on a bed of ivory," (*Desindaphin*). Nor is this supposition to be altogether rejected, for *ivory* might be known in Egypt, either from Ethiopia, or by the caravans from the central parts of Africa; or, it might be procured from India by trading vessels, or merchants: and certainly its beauty and ornament would well become the residence of the *Nazir*, or lord steward of the royal household of the Egyptian Pharaohs.



B E E L Z E B U B

2 KINGS, chap. 1. ver. 2.

THESE two heads are monuments of the ridiculous worship of the Gentiles; the first is in an antique paste, the other in a gem, both in the Museum Storchianum, both of them are images of Jupiter, called by the Greeks *Avaytor* and by the Romans *Muscarius*, that is to say, fly-driver: and to this Jupiter was attributed the function of driving away flies. This worship was introduced on occasion of a sacrifice which Heracles made to Jupiter Olympius in Elis, which being infested with flies, he prayed to that god to drive them off: from hence arose the worship in Elis of Jupiter the fly-repulsor. A similar image to that of No. 2, is on a gem, which Bellerophon explained as signifying the Sun, whose heat repels honey: and by whom the feet of the fly are taken as allusions to the eyes of the sun. *Winkler's Ant. Monum. Ined.* p. 13.

It appears from this, that Bellerophon considered the god of flies as the god of bees, as the same name: might this be one reason why honey was not to be offered on the altar of the Lord? as we find prohibited. *Leviticus* 11. 41.

Edm. 2.

2 KINGS 1. 2.

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...are still called "teeth"
...the Elephant has teeth, ex-
...of no trading weight and di-
...themselves in Scripture,
...instead of *shen-habhim*.
...tooth, and *habenim*, ebony
...As to beds, and
...of ivory: vide on
...the covers of the Tyrian
...we have dismissed the ivory alio-
...Indeed ivory in every state is
...much more for such a situation as
...the strength, resistance, and durability

By ... the Hebrews to
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...they have much the character
...making a stout resistance, if the
...fearful and deadly weapons
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...altogether reported, for ivory might be
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...of the Native, or lord steward of the royal household of the
...Patriarch

REL



BEELZEBUB



B E E L Z E B U B.

2 KINGS, chap. i. ver. 2.

“THESE two heads are monuments of the ridiculous worship of the Gentiles; the first is in an antique paste, the other in a gem, both in the Museum *Stoschianum*, both of them are images of Jupiter, called by the Greeks *Απομύσιος* and by the Romans *Muscarius*, that is to say, *fly-driver*: for to this Jupiter was attributed the function of driving away flies. This worship was introduced on occasion of a sacrifice which Hercules made to Jupiter Olympius in Elis, which being infested with flies, he prayed to that god to drive them off; from hence arose the worship in Elis, of Jupiter the *fly-expulsor*. A similar image to that of No. 2, is on a gem, which Bellori has explained as signifying the Sun, whose heat refines honey; and by whom the feet of the fly are taken as allusions to the rays of the sun.” WINKELMAN, *Monum. Ined.* p. 13.

It appears from this, that Bellori considered the god of flies as the god of bees, at the same time: might this be one reason wherefore HONEY was forbid to be offered on the altar of the Lord? as we find prohibited, Deut. ii. 11.

Edit. 2.

2 KINGS i. 2.

It

It is well known that the "god of flies" was, in Hebrew named *Beelzebub*; and was considered as the patron deity of medicine, for this is clearly implied in the conduct of *Ahaziah*, 2 Kings i. Moreover, that the same deity had power over evil spirits, and was capable of expelling them, appears from the opinions of the Pharisees, Matth. xii. 24, Mark iii. 22, Luke xi. 15, where they accuse our Lord of combination with *Beelzebub*. If we look into heathen antiquity, we find that the Greek Mythology considered *Apollo* as the god of medicine, and attributed also to *Apollo* those possessions by a *pythonic* spirit, which occasionally perplexed and deluded spectators; and of which we have an instance Acts xvi. 10. *Apollo* too was the sun; and *Bellori* is correct in referring his gem to that deity. On these principles, I apprehend we see by what inducement *Ahaziah* sent to *Beelzebub* to inquire the issue of his accident; since *Beelzebub* was *Apollo*, and *Apollo* was the god of physic. We see also the reason of that apparently strange expression of the Scribes, Mark iii. 22. "He hath *Beelzebub*"—*i. e.* he is possessed by a *pythonic* spirit; as we read ver. 30, "because they said, He hath an *unclean* spirit;" *i. e.* of a heathen deity.

With this agrees the contrast in the following verses, between an impure spirit and the Holy Ghost; it illustrates also the propriety of our Lord's assertion, Matth. xii. 28, that he cast out devils, not by a *pythonic* spirit,—not by a supposed sovereign god of physic, but by "the Spirit of God."

Some have thought that, the Jews, who changed *Beelzebub* into *Beelzebul*, "god of a dunghill," had a reference to the Greek of *pytho*, which signifies putrefied: in Homer *epythonto* means, "become rotten." Pausanias, in Delphos.

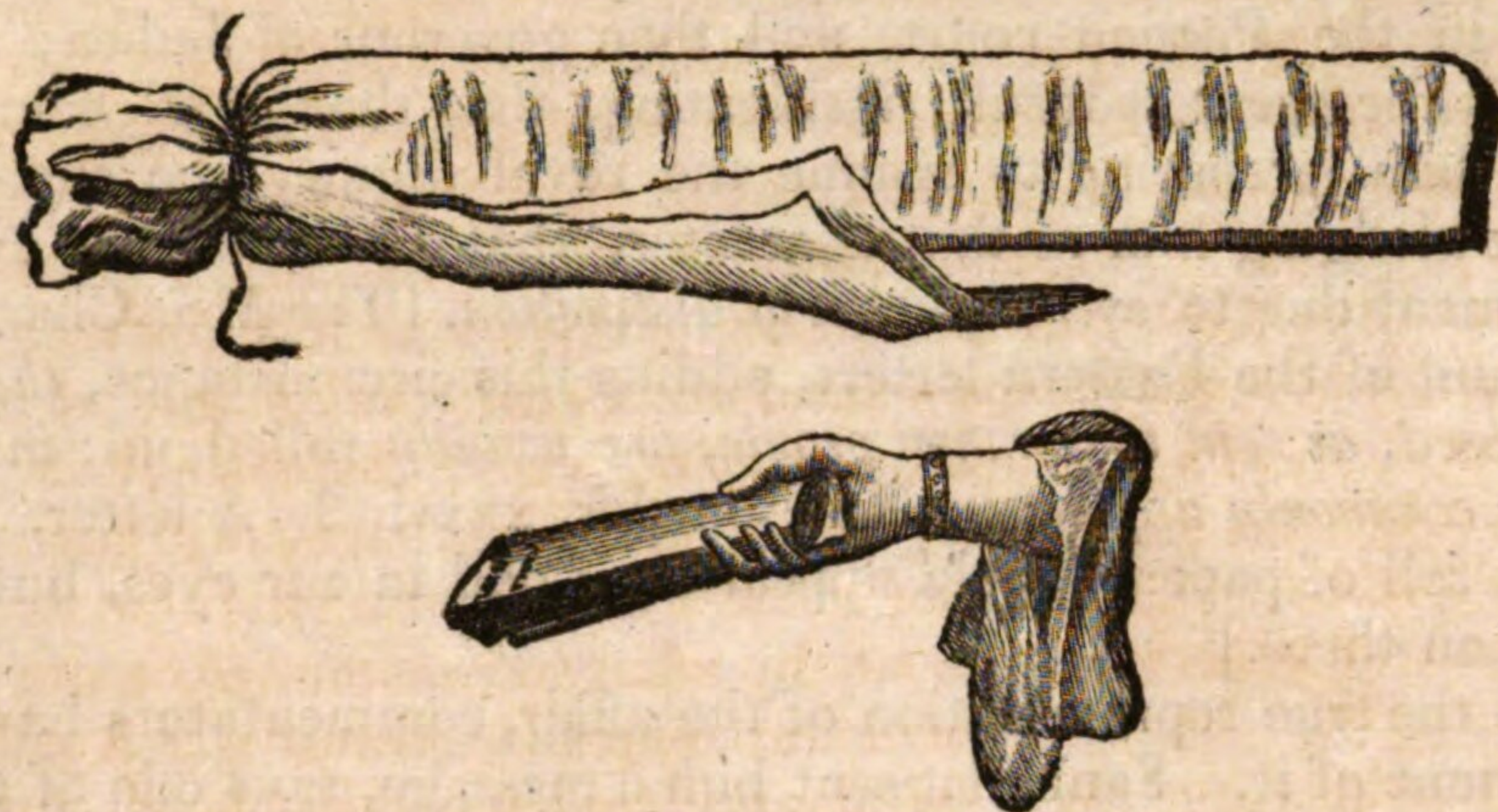
No. I. In our plate exhibits a fly, formed in such a manner, that a human face appears described by his shoulders, while his head, wings, &c. denote the insect: this allegory deserves notice, as being strictly "GOD OF THE FLY."

No. II. Is a head bearded and laureated, in fact a Jupiter, with two flies below, denoting the deity which governed them.

No. 3. is a medal of *Delphos*, where *Apollo* had a magnificent temple, and from whence he was named the *Delphian*. GOLTZIUS, Tab. viii. On one side is the goat's head, in allusion to the story of the *pythian* virtue, or *afflatus*, being discovered by a goat; which occasioned its being afterwards solicited by a priestess, who gave oracles, &c. with the greatest applause. She was called the *pytho*ness, and received the inspiring effluvia while sitting on the sacred *tripos* in the temple. The quiver, and other figures on this face of the medal, are direct references to *Apollo*. On the reverse of the medal is a fly: the same on the reverse of No. 4. These medals not only prove that *Apollo* was the "god of the fly," *i. e.* *Beelzebub*; but they prove that under this character he was peculiarly connected with the idea of a *pythonic* spirit, an oracular inspiration, and therefore was the proper deity to be consulted in respect of future events; and especially on subjects of a medical nature.

EASTERN LETTERS.

NEHEMIAH, CHAPTER VI. VERSE. I.



“NORDEN” tells us, that when he and his company were at Essuaen, an express arrived there, dispatched by an Arab prince, who brought a *letter* directed to the Reys (or master of their barque), enjoining him not to set out with his barque, or carry them any farther: adding, that in a day’s time he should be at Essuaen, and there would give his orders relative to them. “The letter, however, *according to the usage* of the Turks,” says this author, “was open; and as the Reys was not on board, the pilot carried it to one of our Fathers to read it.” P. 109.

“Sanballat’s sending his servant then with an *open* letter, which is mentioned Neh. vi. 5. doth not appear an odd thing, it should seem; but if it was according to their usages, why is this circumstance complained of, as it visibly is? Why indeed is it mentioned at all? Why! Because, however the sending letters *open* to *common people* may be customary in these countries, it is not according to their usages to send them so to *people of distinction*. So Dr. POCOCKE, in his account of that very country where Norden was when this letter was brought, gives us, among other things, in the 57th plate, the figure of a Turkish letter put into a satin bag, *to be sent to a great man*, with a paper tied to it directed and *sealed*, and an ivory button tied on the wax. So Lady MONTAGUE says the Bassa of Belgrade’s answer to the English ambassador, going to Constantinople, was brought to him *in a purse* of scarlet satin. (Letters, vol. i. p. 136.)

“The great Emir, indeed, of the Arabs, according to d’Arvieux, was not wont to enclose his letters in these bags, any more than to have them adorned with flourishes; but that is supposed to have been owing to the unpoliteness of the Arabs; and he tells us, that when he acted as secretary to the Emir he supplied these defects, and that his doing so was highly acceptable to the Emir. (Voy. dans la Pal. p. 58, 59.) Had this open letter then come from
NEHEMIAH, VI. I. Geshem,

Geshem, who was an Arab (Neh. vi. 1.), it might have passed unnoticed; but as it was from Sanballat, the enclosing it in an handsome bag was a ceremony Nehemiah had reason to expect from him, since he was a person of distinction in the Persian court, and then governor of Judæa; and the not doing it was the greatest insult, insinuating, that though Nehemiah was, according to him, preparing to assume the royal dignity, he should be so far from acknowledging him in that character, that he would not even pay him the compliment due to *every person of distinction*. [The MS. Chardin gives us a like account of the Eastern letters, adding this circumstance, *that those that are unenclosed, as sent to common people, are usually rolled up; in which form their paper commonly appears*. Note on Jer. xxxvi. 2. A letter, in the form of a small roll of paper, would appear very odd in our eyes, but it seems is very common there.]

If this is the true representation of the affair, commentators have given but a poor account of it. Sanballat sent him a message, says one of them, “pre-tending, it is likely, *special respect* and kindness unto him, in informing him what was laid to his charge.” So far Mr. HARMER, *Obs.* vol. ii. p. 129.

Contrast with this *open* letter to Nehemiah the closed, rolled, or folded letter, sent by Sennacherib to Hezekiah, 2 Kings, xix. 14. We read, verse 9. “He sent messengers to Hezekiah, saying,”—“And Hezekiah received the [*sepher*] letter at the hand of the messengers, and read it: and Hezekiah went up into the house of the Lord, and SPREAD it before the Lord.” It was therefore folded, or rolled, and no doubt, enclosed in a proper *envelope*; and I would not be certain whether this action of taking the letter from its case is not expressed here by the word *peresh*, which signifies to divide, to separate.

Consider also the passage, Isaiah, xxix. 11. “And the vision shall be to you, as the words of a [*sepher*, the same as the *letter* spread by Hezekiah] LETTER that is sealed—sealed up in a bag closely—which is given to a man of learning to read, but he says, “It is sealed”—how should I know what information it contains? I merely can discover to whom it is directed;” while the unlearned cannot even read the address. We see such occurrences daily in the streets of London: messengers, sent with letters, desire passengers to read the directions for them.

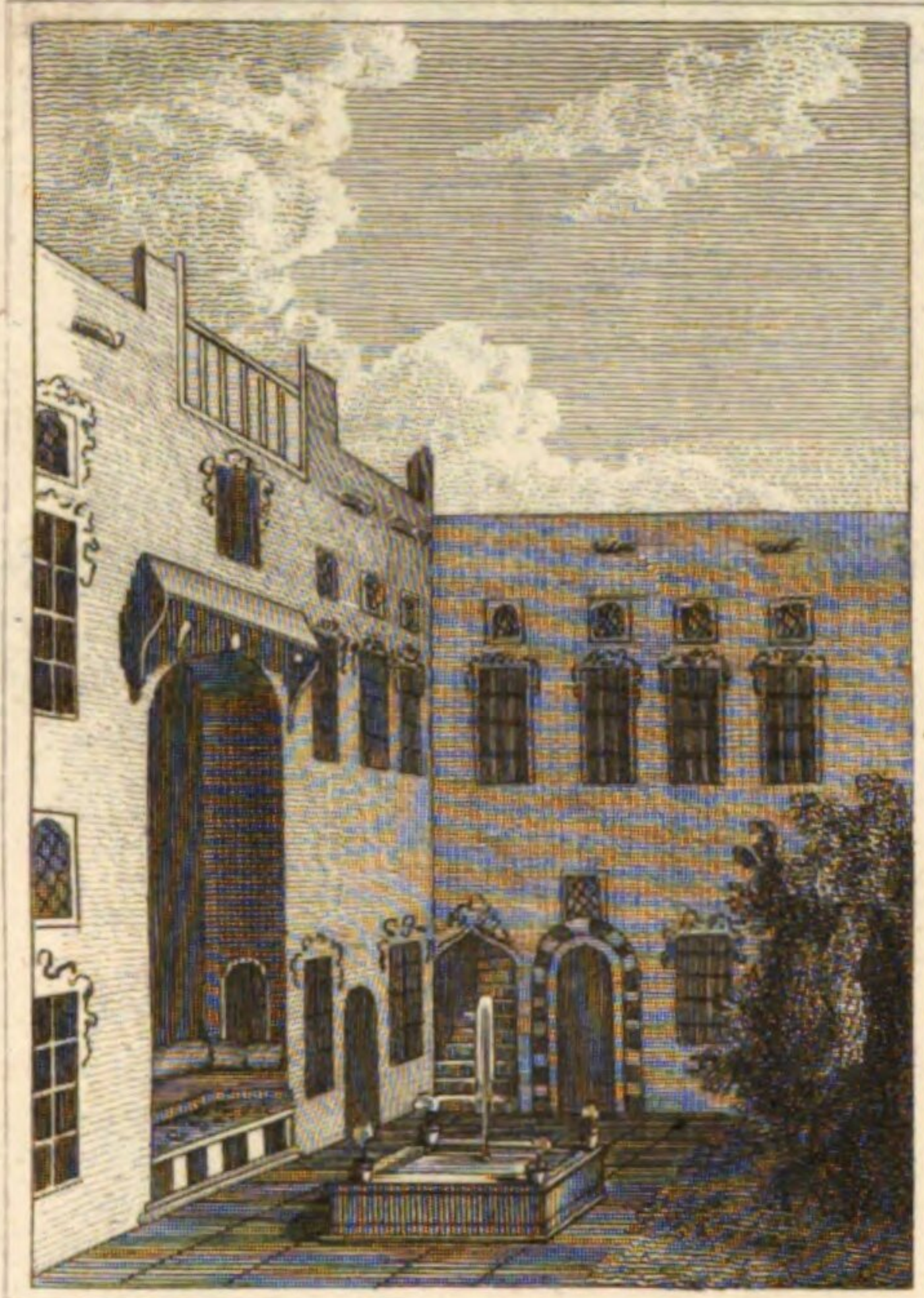
Observe, the messengers sent to Hezekiah are described as *saying*: when in fact they *say* nothing; but only deliver a letter containing their message.

EXPLANATION OF THE UPPER FIGURE, FROM DR. POCOCKE.

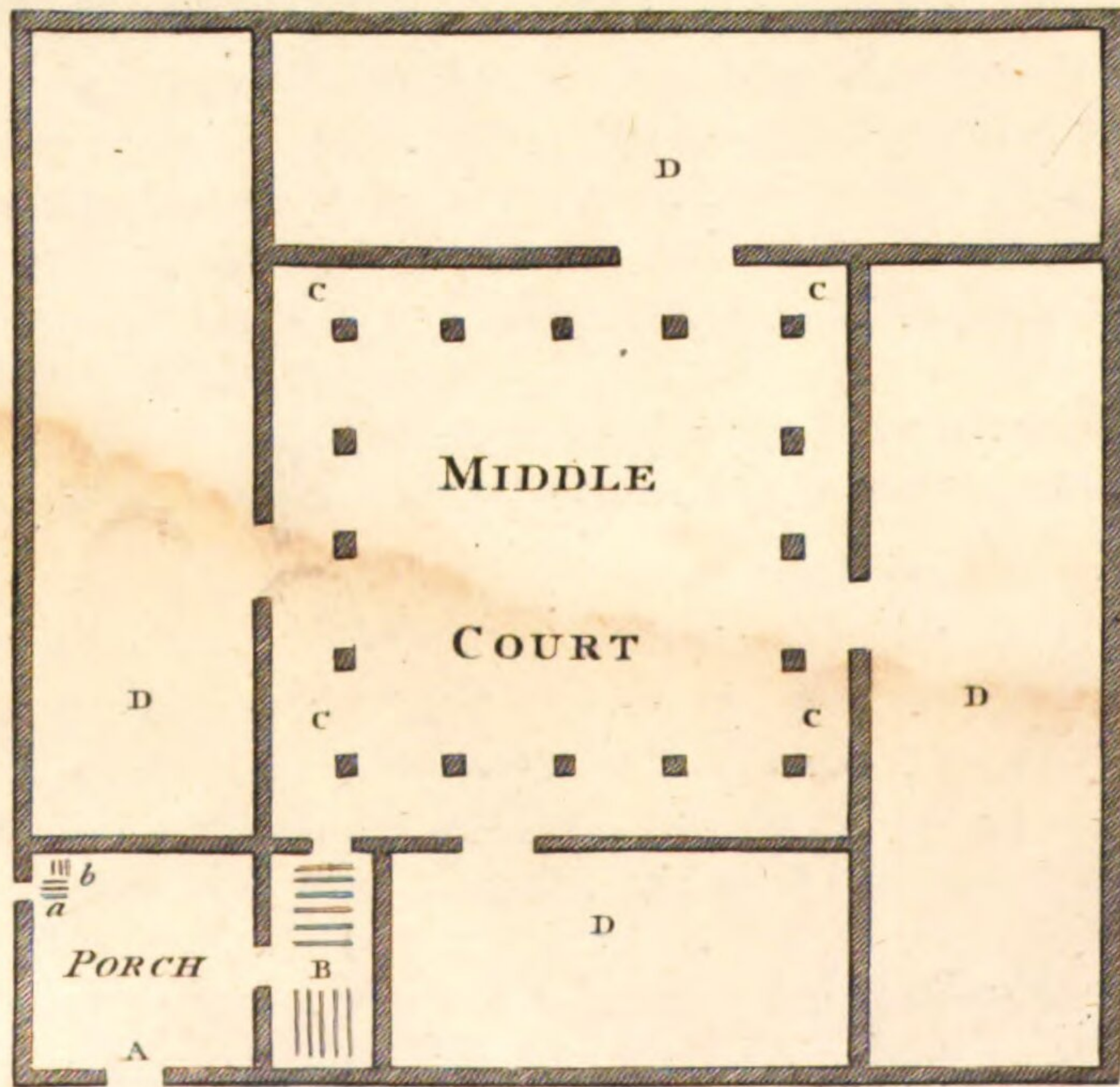
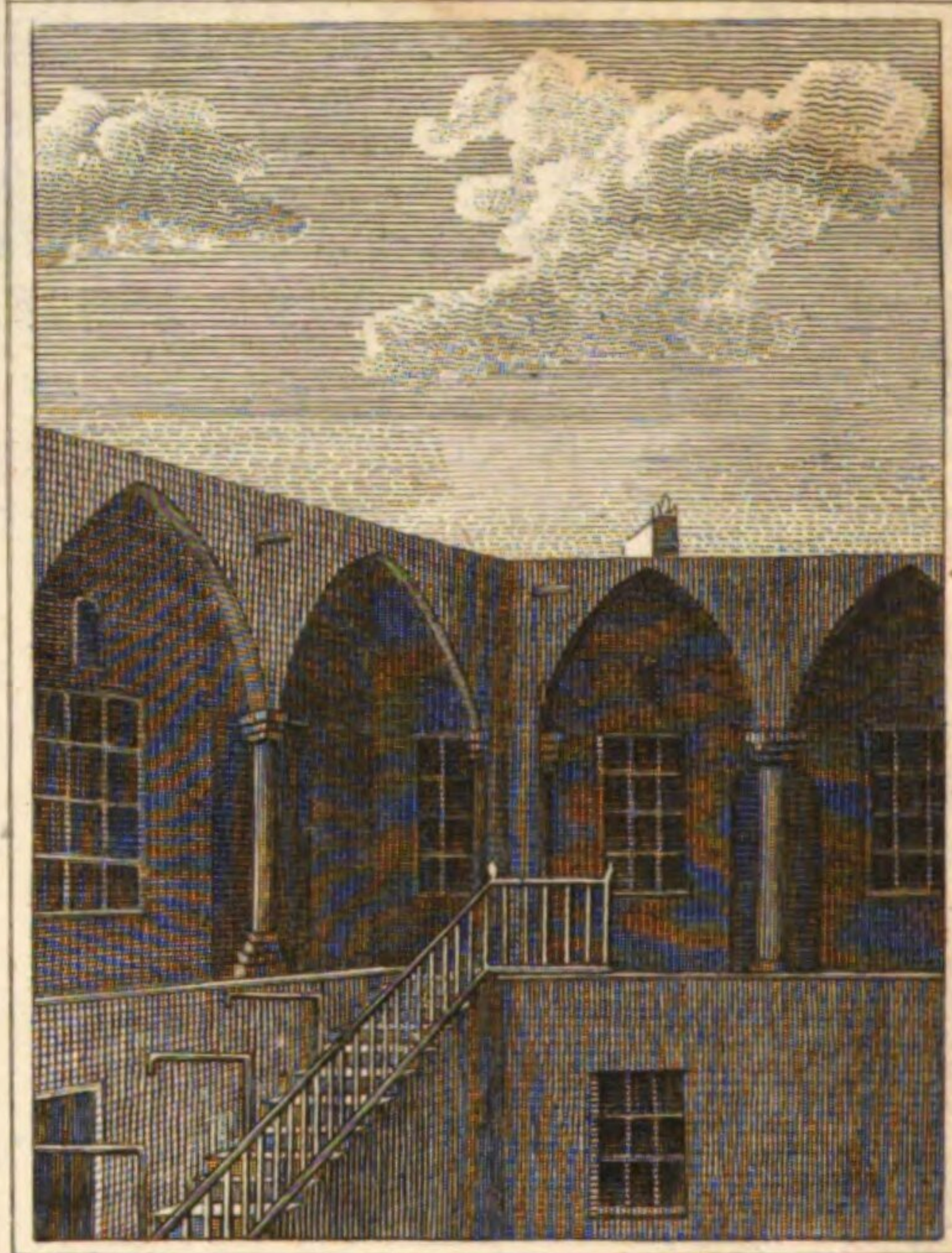
“A Turkish letter put into a satin bag, to be sent to a great man, with a paper tied to it, directed and sealed, and an ivory button tied on the wax. As the Turks rarely write, the name is writ for them, and on the back side of it they make the impression of their name with their seal, generally of cornelian, which they wear on their finger; and it is blacked when there is occasion to seal with it.”

The under figure is a letter held by a Turkish lady in her hand. From the collection of the late Lord Baltimore.

N^o 1.

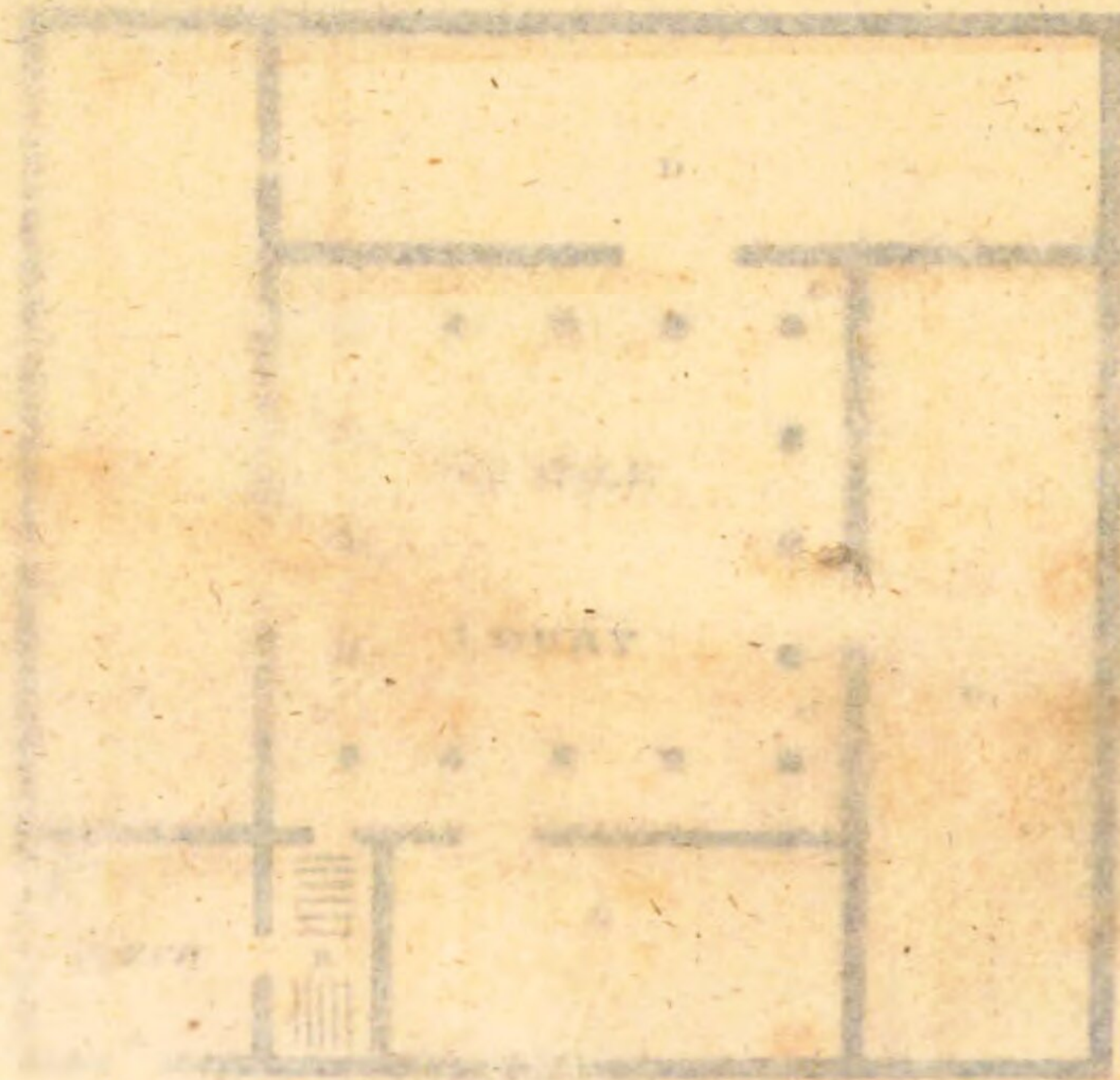
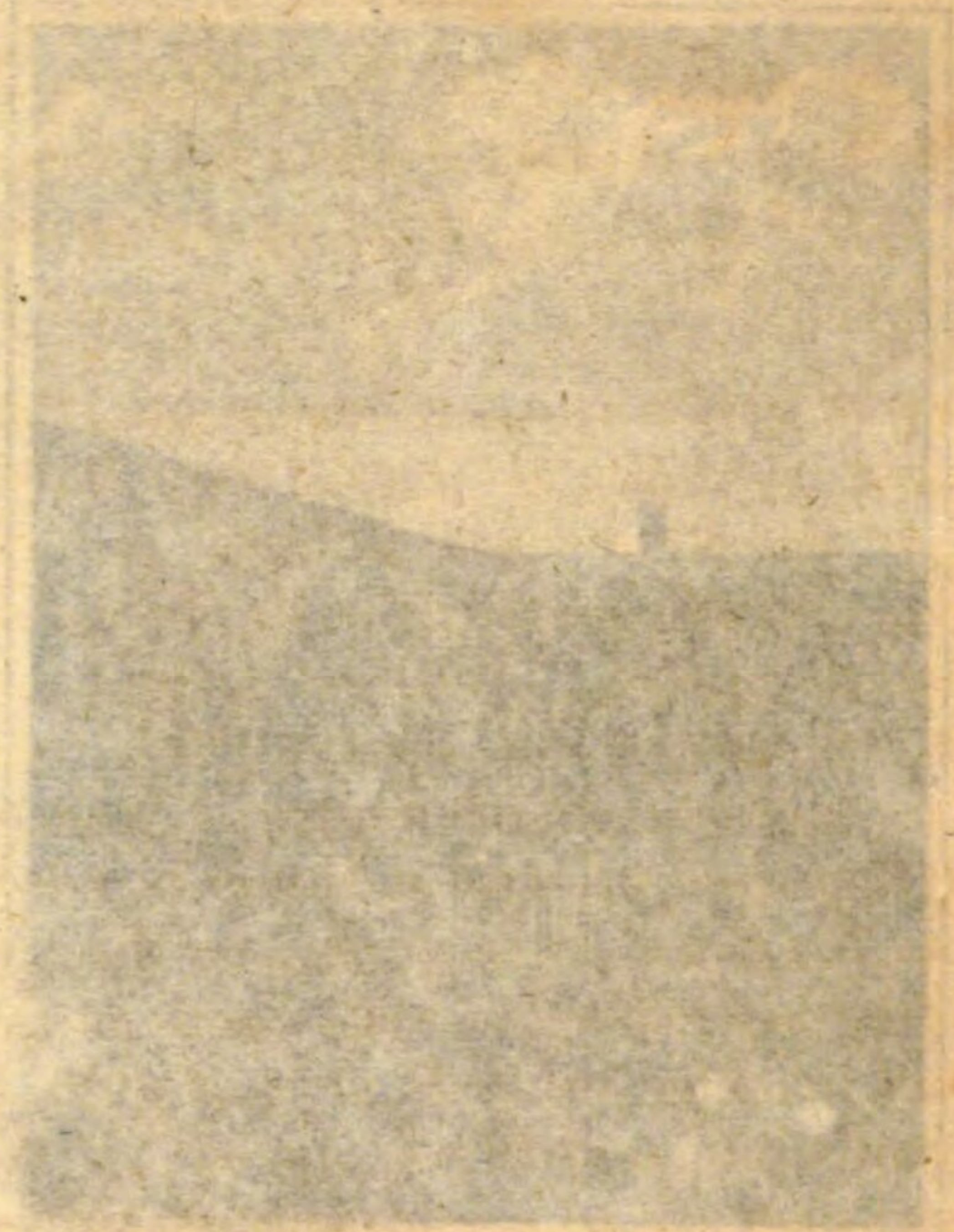


N^o 2.



Plan.

COURTS of EASTERN HOUSES.



PLANS OF A MONASTERY HOUSE

ON THE COURTS OF PALACES,

AND OTHER CONSIDERABLE HOUSES IN THE EAST:—VIZ.

- I. OF THE PALACE OF KING AHASUERUS, Esther, Chapter i. 6.
- II. ON THE ALCOVE OF HEZEKIAH'S SICKNESS, 2 Kings, Chapter xx.
- III. ON THE HOUSES OF IVORY, Amos, Chapter iii. 15. iv. 4.

IT may be taken as a fair conclusion, that wherever our translators have inserted a number of words *in italic*, they have been embarrassed to make sense of a passage; and some have inclined to think, that in proportion to the number of words they have inserted, is the probability of their having missed the true import of the place. Without risking this assertion, I may venture to ask the reader, whether he has been satisfied with the ideas communicated in the fifth and sixth verses of the first chapter of Esther? “The king made a feast to all the people *that were* present in Shushan, the palace; both unto great and small, seven days, in the court of the garden of the king's palace; *where were* white, green, and blue *hangings*, fastened with cords of fine linen, and purple, to silver rings and pillars of marble; the beds *were* of gold, and silver, upon a pavement of red, and blue, and white, and black marble.” What are we to understand by all this?—hangings fastened to silver rings, to pillars of marble?—cords made of fine linen? beds of gold and silver, laid on the pavement? &c.

Commentators give us very little information on this passage: and it is much better to trust at once to ourselves, than to transcribe their opinions.

The first thing observable is, the CANOPY covering the court: it was of *white CANVAS* (*carpas* כרפס): the BRACES of it were *blue*, (וחבלת אהון) *i. e.* the cords, &c. used to support this canopy, and to keep it in its place, properly extended, &c. over head. Secondly, in the court, below, were pavilions, platforms, or *railed divisions* [the word (חבלי *chebeli*) signifies the railed deck of a ship: vide FRAGMENT on Ancient Ships, No. CCLXXVI, page 139] of *linen*, [or hung with linen] and of *aragaman* [calico? fine cotton?] upon railings of *silver* PILLARS—smaller pillars [*galili* גלילי] silvered over and COLUMNS of *white marble*; and the *divan cushions*, (vide FRAGMENT, No. XII. p. 15) were *embroidered with gold and silver*; these were placed upon MUSTABYS of *porphyry*, (red marble) and *white marble*, and *round-spotted marble*, and *marble with wandering-irregular-veins*.”

To justify this description, we shall first attend to the canopy; the reader will judge of its probability and use by the following quotations.

“Among the ruins remaining at Persepolis, is a court, containing many lofty pillars: one may even presume that these columns did not support any architrave, as Sir JOHN CHARDIN has observed, p. 76, tom. 3. but we may venture to suppose, that a covering of tapestry, or linen, was drawn over them, to intercept the perpendicular projection of the

Esther, Chap. i. Verse 6.

sun-

sun-beams. It is also probable that the tract of ground where most of the columns stand, was originally a court before the palace, like that which was before the king's house at Susa, mentioned Esther, chap. v. and through which a flow of fresh air was admitted into the apartments." LE BRUYN, *Vol. II. p. 222.*

This idea of LE BRUYN, formed almost on the spot, supports our suggestion of a canopy covering the court. This is confirmed also by the customs of India. I have been told by a gentleman from whom I requested information on this subject, that "at the festival of *Rajah Durma* in Calcutta, the great court of a very large house, is overspread with a covering, made of canvas lined with calico; and this lining is ornamented with broad stripes, of various colours; in which (in India, observe) *green* predominates. On occasion of this festival, which is held only once in three years, the master of the house gives wine and cake, and other refreshments to the English gentlemen and ladies who wish to see the ceremonies; and payment, as well as hospitality to those who perform them." That such a covering would be necessary in hot climates, we may easily suppose; nor is the supposition enfeebled by remarking, that the *Coliseum*, or *Flavian Amphitheatre* at Rome, has still remaining on its walls the marks of the masts, or scaffolding, which were erected when that immense area was covered with an awning; as it was during the shows exhibited there to the Roman public. *Vide* the extract from Dr. SHAW, *Fragments*, No. CCIV, p. 18: or on Luke v. 19. also the Plate in the second part of these Thoughts.

The word (מחב) rendered BRACE, signifies to *catch, to lay hold of, to connect*; it may be thought, that these went from side to side of the house; were fastened also to proper projections high in the sides of the house; and, passing under the *white* canvas, *blue* braces must have had an ornamental effect.

In the lower part of the court, the preparations consisted in what may be called a *railed platform* on a MUSTABY: what these were, the reader will fully understand, by an extract from Dr. RUSSELL's *History of Aleppo*.

"—Part of the principal court is planted with trees, and flowering shrubs; the rest is paved. At the south end is a square basin of water with *jet d'eau*s, and close to it, upon a *stone* MUSTABY, is built a *small pavilion*: or, the *mustaby* being only railed in, an open divan is occasionally formed on it. [Note. A Mustaby is a stone platform, raised about two or three feet above the pavement of the court.] This being some steps higher than the basin, a small fountain is usually placed in the middle of the divan, the mosaic pavement round which, being constantly wetted by the *jet d'eau*s, displays a variety of splendid colours, and the water, as it runs to the basin, through marble channels which are rough at bottom, produces a pleasing murmur. Where the size of the court admits of a larger shrubbery, temporary divans are placed in the grove; or arbours are formed of slight latticed frames, covered by the vine, the rose, or the jasmine: the rose shooting to a most luxuriant height, when in full flower, is elegantly picturesque.

"Facing the basin, on the south side of the court, is a wide, lofty, arched alcove, about eighteen inches higher than the pavement, and intirely open to the court. It is painted in the same manner as the apartments, but the roof is finished in plain, or gilt stucco; and the floor round a small fountain, is paved with marble of sundry colours, with a *jet d'eau* in the middle. A large divan is here prepared, but being intended
for

for the summer, chints, and Cairo mats, are employed, instead of cloth, velvet, and carpets. It is called by way of distinction the Divan, and by its north aspect, and a sloping painted shed projecting over the arch, being protected from the sun, it offers a delicious situation in the hot months. The sound, not less than the sight, of the *jet d'eau*, is extremely refreshing; and if there be a breath of air stirring, it arrives scented by the Arabian jasmine, the henna, and other fragrant plants growing in the shrubbery, or ranged in pots round the basin. There is usually on each side of the alcove a small room, or cabinet, neatly fitted up, and serving for retirement. These rooms are called *kubbe*, whence probably the Spaniards derived their *al coba*, which is rendered by some other nations in Europe *alcove*." Page 30.

In another part Dr. RUSSELL gives a print of a mustaby, with sundry musicians sitting on it, on which he observes, "The front of the stone *mustaby* is faced with marble of different colours. Part of the court is paved in mosaic, in the manner represented in the print." The part which we have copied in our print, "shews, in miniature, the inner court of a great house. The door of the Kaah, and part of the cupola appears in front; on the side, the high arched alcove, or Divan, with the shed above; the marble facing of the mustaby, the mosaic pavement between that and the basin, and the fountain playing."

This account of Dr. RUSSELL's coincides perfectly with the history in Esther; and we have only to imagine that the *railings*, or smaller pillars of the divan [the *ballustrades*?] on the mustaby in the palace of Ahasuerus, were of silver, (silver-gilt) while the larger, called *columns*, placed at the corners, suppose, (as in our print,) or elsewhere, were of marble; the flat part of the mustaby also being overspread with carpets, &c. on which, next the railings, were cushions richly embroidered, for the purpose of being leaned against.—These things, mentioned in the Scripture narration, if placed according to the Dr's account, enable us to comprehend the whole of the Bible description, and justify every word in it. That the last three words, describe three different kinds of marble, of which the *mustaby* of Ahasuerus was composed, is evident from the signification of their roots. And as to the *linen* which was appended [in festoons?] to the railings, with its accompanying *aragaman*, we may ask, if this word signifies *purple*, what was the subject of it, silk, worsted, or cotton? Was it the *chints* of Dr. Russell? or was it of the *diaper* kind *i. e.* *figured* linen? or was it calico? which, on the whole, I incline to think it was.

ON THE ALCOVE OF HEZEKIAH'S SICKNESS.

I cannot quit the account given by Dr. RUSSELL of an Eastern *alcove*, without attempting to apply it to the history of the sickness of Hezekiah, on which we bestowed a few words formerly. [*Vide* FRAGMENT, No. II, page 6.] We then conjectured, that Hezekiah might lie in a kind of "open pavilion," in the garden of the inner court of his palace. Suppose we fix his situation to that of such an alcove. According to Dr. RUSSELL this is a highly ornamented building, is named *par excellence*, the Divan, is cool, shady, sheltered, delicious, and refreshing, by reason of the trees around it, and the fountain playing before it. We may safely conclude that the *dial* of Ahaz was placed where the sun beams full

would fall upon it: we know it stood in the inner court, and Isaiah seems to point to it, as it were, with his finger, "that shadow, that dial—that before you, full in your sight." Can we find, in the inner court, a situation which unites more of the circumstances implied in the history, than this alcove does? If Hezekiah was in this divan, then—though strangers were excluded from hence, yet the prophet knew where to find the king, without intruding on his secrecy, or haram;—then, the king was in a shady recess, though the dial stood in the sun-shine; and then—the king saw the miraculous retrogradation of the shadow: which was what we formerly endeavoured to establish.

ON THE IVORY HOUSES OF THE PROPHET AMOS.

Is this *alcove* what the prophet Amos had in view, when he says, chap. iii. 15: "I will smite the house for the winter, together with (literally UPON) the house for the summer, and shall perish the houses of ivory, and shall fail the houses of the great"—beams, columns, construction?

Were these "houses for the *summer*" such shady cool retreats, having a *north-ern* aspect, as Dr. RUSSELL describes at Aleppo, surrounded by groves, fountains, &c? if they were, then, as these were formed *below*, in the main buildings around the courts of a great house, the destruction of these summer houses would imply the destruction of the main building, also; [the *winter* house; another part of which, having a *southern* aspect, enjoyed the warm beams of the sun during the winter months] and they might be ruined, not only at the same time, but, strictly speaking, the great house UPON the smaller alcove. There is no *necessity* then, for supposing that these summer houses, were houses of pleasure, at a distance in the country, though such is the thought of Mr. HARMER, and such might, occasionally, be fact. I presume also, that the following sentence is *exegetical* of the former: the *houses of ivory* are the same as the summer houses; the *houses of great* construction are the same as the winter houses; if so, then, the alcove summer house was ornamented with *ivory*:—and this agrees with the decorations said by Dr. Russell to be bestowed on the alcove, at Aleppo.

A *query* may be added, whether the *ivory* beds of this prophet, chap. vi. 4. are not the furniture of these alcoves? The *beds* themselves, *i. e.* the mattresses, &c. could not be made of ivory; but, that *duan* whereon these coverings were laid (*vide* FRAGMENTS, No. XII, XIII.) might be *ornamented* with ivory; and to this sense the use of the Hebrew word *mitheh* agrees. In this acceptance, there is no repetition in the prophet's words, when he mentions voluptuaries "lying upon *mithehs*—duans—their frame work ornamented with ivory; and stretching themselves (yawning?) upon the *oreshut*—covering of those duans; meaning carpets, splendid cushions, &c. All these embellishments, these enervating luxuries, the nature, the enjoyments, and the actions of these voluptuaries, agree with the expected delights of an alcove, as described by Dr. RUSSELL.

CONSIDERATIONS

CONSIDERATIONS

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ON THE HISTORY OF THE PARALYTIC LET DOWN BEFORE JESUS,
LUKE, CHAP. V. VERSE 19. COMPARED WITH THE SAME HISTORY,
MARK, CHAP. II. VERSES 4, &c.

ON a former occasion we submitted to the reader, an extract from Dr. SHAW's *Travels*, which was intended by that writer and understood by ourselves, to be a fair explanation of, and comment on, *Luke* v. 19. where we read, that "those who carried the paralytic in his bed, κλινης, not being able to bring him before JESUS, because of the croud,—they went upon the house top το δωμα, and let him down through the tiling δια των κεραμων, with his couch τω κλινιδιω, into the midst εις το μεσον, before JESUS."

This whole history, and especially the conduct of the four bearers of the sick man, certainly sounds very strangely in English ears; but, by adopting a few Asiatic ideas, we reduce it to correct coherence.

It may be premised, that, in general, houses in the East are but one story high; so that the men who carried the paralytic, had not far to mount with him, nor far to lower him down from the roof to which they had ascended. They went up the private stair case of the *oleah*, or attached building, which was free from the croud, because JESUS being in the interior of the house, was distant from *this* entrance.

JESUS, I conceive was in the MIDDLE COURT of the house; for Dr. SHAW tells us, the το μεσον "the midst" of St. Luke, is the *el woost*, the court which is allotted for the reception of large companies," [whereas in our version this "in the midst," seems to imply—among the people, in the midst of the croud,] and, that a large company was now attending to the discourses of JESUS, is plain from the history. The mention of a *middle* court implies that this was a large house; while the observation that Doctors of the law and Pharisees were sitting by (who were come from surrounding towns, and even from Jerusalem) marks it as an extensive building, inhabited by a person of some consequence, who accommodated these dignified visitors on this occasion;—which some have supposed was an appointed meeting of these great men. Now, to a house of magnitude, a private stair-case always is an appendage; and this stair-case is next the porch, or street, says Dr. SHAW, "without giving the least disturbance to the house." Up these stairs, therefore, the bearers of the paralytic carried him, and his bed: and so far over the (flat) roof of the house, till they came to the middle court; but, being arrived here, how should they make known their errand?—they could not possibly *shew* the patient to the people (nor to JESUS) below them; so they determined on letting him down over the parapet.

We have thus got our patient on the roof, το δωμα, but this roof was *flat*, and even paved, we must therefore absolutely prohibit the idea of *tiles* covering this roof,

roof, which without such prohibition, *will* rise in the mind of an Englishman. On the contrary, these men lifted up their burden over the parapet, (say two feet in height) and having tied the four corners of the bed with cords, they let him down the face of the wall, ALONG THE PAINTED TILES, with which that face was adorned, until he was lowered into the MIDDLE COURT, where JESUS stood teaching. To establish this representation, we remark, that the word *κεραμος* means a tile of a better kind—not a *brick-kiln tile*, but an ornamental, painted, piece of pottery;—*terra figularis, vas fictile*;—a potter's production, which he has taken pains with; like the Dutch tiles, or galley tiles, of our old fashioned chimneys. Such is the kind of tile which we ought to understand in this place; and, that such are used to ornament the faces of the walls of the internal court, we have the authority of Dr. SHAW himself; who not only describes them, but shews them very distinctly in his print. [Copied from him, FRAGMENT, No. CCIV.]

This description of the PLACE where the event happened, excludes at once every possibility of “breaking up tiles, spars, and rafters,”—every possibility, of “JESUS and his disciples escaping with only a broken pate, by the falling of the tiles, and the rest being smothered with the dust:” which is the ludicrous language of a Remarker on the Miracles of JESUS: but with what accurate ideas of this transaction, let the reader now judge: and let the reader judge too on the necessity of accurate information on some seemingly unimportant *minutiae*, in order to vindicate, correctly and adequately, the miracles of JESUS.

Let us now turn to the evangelist Mark's account of this event, chap. ii. 4. say our translators, “And when the men who carried the paralytic could not come nigh to JESUS for the press [*read through the croud*] they uncovered the roof *απεστέγασαν την στέγην*, where he was; and when they had broken *it* up *εξορύξαντες*, they let down the bed *κράββατον*, wherein the sick of the palsy lay.”

The first thing here as it seems, is, that they UNCOVERED the roof, and BROKE it UP: notwithstanding St. Luke says, this occurred in the *middle court* of a great house; which court could have no roof: but Dr. SHAW tells us, and we know from other quarters, that the court was covered by a canopy, as a shelter from the solar rays: this is clearly what is meant by the word *stege*, rendered *roof*, which should have been rendered *covering*, or *shade*, [*στερω, operio, occulto.*] This is the rendering of the Syriac version, *tattilo*, any kind of covering; and the expression of the evangelist is a kind of *paranomasia*, or repetition of the same word: *ESTEGASAN* should signify, “they covered by the *stege*,” *i. e.* by applying it; and *apestEGASAN* should signify, “they uncovered by the *stege*,” *i. e.* by removing it: which, in English might be rendered, they “*unshadowed* by removing the *shade*;” taking *shade*, as a noun, in the sense of *shadower*: this being harsh, we might be content to say, “they *uncovered* the *covering*” of the court; this conveys the idea, though the phraseology is not pleasant,—yet we say, to *roll back* the *roller*; and I do not know, that to say “*unskreen* the *skreen*,” is any better. To say simply, “remove the covering,” though it marks the ac-
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tion, yet does not convey the relation of the words used: but had this relation of these words been expressed, our translators never could have been understood as meaning, “unroof the roof;” that would have appeared improper, a liberty, and a labour, not to be taken by four strangers, who might well enough have waited till the sermon was over. But, if the *braces* of this veil, as I suppose, were fastened to hooks, &c. in the parapet wall, or were inserted into the roof, or &c. of the building, then these men, by unfastening one of these *braces*, would open the canopy which prevented them from seeing below, and prevented the people below from seeing them; this part of the canopy, so deprived of its support, would open a way to the presence of JESUS: and thus they would, strictly speaking, *uncanopy* the *canopy*: which is what the phraseology of the evangelist implies.

Our translators having mentioned the *roof*, seem to say, “they broke it up.”—But, I rather suppose this word refers to the bed; though I doubt whether it signifies *broke up*. This word (*εχορυσαντες*) is omitted in the Cambridge MS. and is not regarded in the Syriac version; the Persian version renders, “to the four corners of the bed they attached cords.” We have the same word *Gal. iv. 15.* where it is rendered, *plucked out*—but, how can that be its meaning in this instance? We shall answer, easily, after we have considered, that the evangelists use two words, both inaccurately rendered *bed*; the first, *kline*, signifies a truckle-bed, suppose, *i. e.* a bedstead; or a bed having a frame-work round it: this is St. Luke’s word; whereas, St. Mark says it was a *krabbaton*, or, bed consisting of a single carpet, or &c. only. Was it *both* these kinds of beds, then?—is here no *contradiction* between the evangelists? none at all: because, it was both these kinds of bed. Consider, first, that this man was “borne of four,”—which, may safely be taken to imply one bearer at each corner of his truckle-bed, *kline*; now, a truckle-bed was much too large a machine for them to force through the passages leading to the middle court, and through the croud assembled; they therefore took this *kline* up the private staircase, and having carried it to the parapet next the inner court, they took out the *sacking* from the bedstead, whereby it became a mere *krabbaton*, equal to a mere carpet, &c. and let this *krabbaton*, with the patient on it, down into the court below.

Here we see clearly the propriety of using a word which signifies *plucked out*; for indeed, they *plucked out* the *sacking* from the bedstead; and then comes in the idea of the Persian translator, these four men tied four cords to the *krabbaton*, one at each corner, and let it down into the court, through the opening they had made in the canopy.

See now how highly we are obliged to the evangelists, whose different narrations, whose different words, when properly understood, mutually illustrate each other! St. Luke says, behold, men brought a man in a *bed*—*kline*: and let him down through (along) the tiling, with his *couch*, *klinidio*,—LITTLE *kline*; which, answers precisely to the *krabbaton*,—*sacking*, [hammock?] of St. Mark.

Let us endeavour to arrange these narrations into one historical paraphrase. “And behold, for it is well worthy notice, they came unto JESUS, bringing

bringing one sick of the palsy, who lying along in a truckle bed [*kline*, Matt. ix. 2.] was borne by four bearers, one at each corner of the bedstead: and they sought means to bring him in, with this incumbrance of a bedstead, because the poor sufferer was unable to walk, designing to lay him before JESUS, as a remarkable object of compassion. And when they could not find by what way they might bring him in, and could not *even* come nigh him, JESUS, because of the multitude, they took the paralytic, in his bedstead, *kline*, and went up the private staircase, by which they entered on the roof of the house, and going along the roof, till they arrived at the inner court, they loosed some of the *braces* of the covering that was extended over that court; which *braces* were connected with the parapet upon the roof. And when they had separated the sacking, *krabbaton*, from the bedstead, *kline*, they tied a cord to each of the four corners of the sacking, and let down this smaller kind of bed, or couch, *klinidion*, along the painted tiles, into the middle court, direct before JESUS; close to him, in fact, so that he could not avoid seeing the patient; nor could the people avoid looking up, to see where the disabled sufferer came from."

EXPLANATION OF THE PLATE.

In No. I. the reader will remark, the *Mustaby*, or raised platform, with a fountain playing in it; the corners of this *mustaby* are knobs of marble: on a raised platform of a like substance, in the palace of Ahasuerus, were silver-gilt ballustrades, against which were placed embroidered cushions, &c. and which were decorated with festoons, hangings, of calico, &c. The *mustaby* was overspread with carpets, and other coverings, while its sides displayed the richest variety of marbles, of the most beautiful colours.

The *Alcove*, or summer house, opposite to the fountain, will engage the reader's notice: also the ornaments, the cushions, and other furniture of the alcove; among which inlayings of ivory might easily find a place. N. B. Also the shrubbery of aromatic plants.

No. II. Represents the inner court of a great house, according to Dr. RUSSELL, shewing the staircase ascending out of the court into the gallery, in the sides of which are the private chambers. As it is extremely natural for a person who is engaged in teaching, in speaking to a multitude, to wish to be elevated somewhat above them, in order that he may see all and be seen by all, and be the better heard, I indulge my fancy so far, as to suppose, that our Lord might occupy the head of such a staircase, speaking to the people; who, *standing*, filled the court (say eight or ten feet) below him; while the Scribes, Pharisees, and Doctors of the law *sat*, as the evangelist notes, on seats, &c. ranged under the colonnade, in the gallery, around, or rather on each side of JESUS. The bearers of the paralytic,—having brought him to the edge of the court, and removed the canopy from over it, raised him over the parapet of the terrace, and let him down the wall, say along the pillar to the right hand, whereby he came direct in the sight of JESUS, who comforted, cheered, and pardoned him; in a manner which was very audibly heard, and understood by the Doctors, &c. who encircled Jesus. Then he healed the man, took him into the gallery, and the patient, carrying that whereon he had laid, walked away; going through the midst of the Doctors, for their closer examination.

To render this perfectly clear, we have added the Plan of a Great House, from Dr. SHAW; where observe—the entrance door A, leading to B, which admits into the MIDDLE COURT of the house, C. Along these passages the bearers of the paralytic attempted to force their way; but, finding this impossible, they went up the private stairs in the porch, *a, b*, till they came on the roof over D, along which they carried their burden till they came to the middle court, C, a canopy over which they opened, to let down the patient.



IBEX or ROCK-GOAT.

OF THE ROCK GOAT, OR IBEX.

Job, Chap. xxxix. Verse 1.

THERE are three places in Scripture where the animal of the goat kind is mentioned either directly, or by allusion, which it is difficult to identify. — 1 Sam. xxiv. 2. "And went to seek David and his way on the rocks, and the wild goats." Literally, on the supermines, or on the tops of the rocks of the desert. — Psalm civ. 74. "The high mountains to the flock for refuge, and the high mountains are to the Saubemim." [Note for the artist, *Saubemim*, see Plate. x. 10. plate.] — But there is a third passage where this creature is more distinctly referred to, and its manners are described at greater length, Job xxxix. 1. and the text is thus rendered in our translation: "Knowest thou the time when the Wild Goats of the rocks bring forth? Canst thou mark when the Hinds do so? Canst thou number the months they fail? or, knowest thou the time when they bring forth? They bow themselves; they bring forth their young, and they cast out their sorrows. Their young ones are in good liking; they grow up with corn; they go forth and return not to them."

In a fourth passage, Prov. vi. 19. we have this same creature, the Ibex, in a feminine form: "Let thy wife be as the loving hind and pleasant Roe."

These two passages seem to be unhappily rendered; for, 1. what is the *Wild Goat of the rocks*, is in the other *the pleasant Roe*; a creature so very different, that one rendering or the other must be erroneous. 2. The *Wild Goat of the rocks* is said to nourish its young with corn; but corn is not cultivated on or about the rocks where these goats are found; and still more unluckily, the original word, if taken in the sense of corn, denotes corn which has been threshed, and stripped of its husk: this state of preparation is every way ill associated with the barrenness intended to be described, as marking the residence of the wild goat of the rocks.

On 1 Sam. xxiv. 1. in the Expository Index I have taken the *Ibex*, *Ibex*, for the *Ibex*, or *Rock goat*; to this agree all the meanings attributed to the creature in Scripture; from which we learn, that it inhabits rocks and mountains, and is of a strongly affectionate disposition.

But before we proceed, it is proper to discharge the passage in Job from its error; in fact, the word rendered corn, [bar, 22] signifies a wild desert place, an open, barren country, a roaming track. See on 1 Kings iv. 23. No. 9. where *bar*, and *baru*, in the Chaldean form are noticed. *Baruch*, and *Baruch* are also *Baruch*, in Job, maintain this opinion. This correction lends to a different view of the passage, and probably it might be still further improved, by taking the import of the term *baruch*, in Job, as including direct and personal, or at least appropriate superintendence.

Job, Chap. xxxix. Verse 1.

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VIEW OF ROCK GOAT.

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These two passages seem to be unhappily rendered; for, 1. what is in one the *Wild Goat of the rocks*, is in the other the *pleasant Roe*; a creature so very different, that one rendering or the other must be erroneous. 2. The *Wild Goat of the rocks* is said to nourish its young with *corn*; but corn is not cultivated on or about the rocks where these goats are found; and still more unluckily, the original word, if taken in the sense of *corn*, denotes corn which has been threshed, and stripped of its husk: this state of preparation is every way ill associated with the barrenness intended to be described, as marking the residence of the wild goat of the rocks.

On 1 Sam. xxiv. 1. in the Expository Index, I have taken the *Iol*, *Iolem*, *Ioleh*, for the *Ibex*, or *Rock-goat*; to this agree all the manners attributed to the creature in Scripture; from which we learn, that it inhabits rocks and mountains, and is of a strongly affectionate disposition.

But before we proceed, it is proper to discharge the passage in Job from its *corn*; in fact, the word rendered *corn*, [*bar*, בר] signifies a wild desert place, an open CLEAR country, a *roaming track*. See on 1 Kings iv. 23. No. 9. where *bar*, and *bara*, in the Chaldee form are noticed. *Kimchi*, and *Levi Ben Gershon*, *in loc.* maintain this opinion. This correction leads to a different view of the passage; and probably it might be still farther improved, by taking the import of the term *knowing*, in Job, as including direction and appointment, at least *appropriate* superintendence.

JOB, Chap. xxxix. Verse 1.

Knowest

Knowest, *i. e. directest* thou the time of delivery of the *IBICES* of the rock?
 And the parturition of the *HINDS* hast thou noted?
 Hast thou numbered the months they fulfil?
 And knowest thou the period when they bring forth?
 They bow themselves; they discharge their conceptions;
 They cast forth their burdens;
 Their offspring increase in strength;
 They augment in size in the wilds,
 They go off, and return to them no more.

This paragraph, then it appears is the continuation of one uniform enquiry; a representation perfectly accordant throughout, which agrees with matter of fact, and therefore is entitled to be received as correct. The force of the enquiry consists in the circumstance, that the *Ibices* inhabit rocks and mountains, the very *summits* of rocks and mountains; far from the residence of man; further still from the level country of Arabia; how then could the care, the superintendence of Job, or indeed of any man, dwell where he may, contribute to the sustenance, the fertility, the security of these wanderers, frequenting haunts so distant, and so dissimilar from human abode? How could he ease the parents? How preserve their young, and advance their growth to maturity?

It deserves notice, that in these two passages the *Hinds* (*Ailuth*) are associated with the *Ibex*:—is it because the Hind (stag) inhabits the forest, and roams amid its wildnesses, as the *Ibex* roams amid the fastnesses of the mountains? or is this *Aileh*, a mountain animal, and therefore consorted with another mountain animal, the *Ibex*? It can hardly mean the common female stag, since the number of her months, the period of her gestation, and the time of her parturition could not, one should suppose, be unknown in the days of Job.

The correspondents of the Abbe Rozier in his Journal, have given much information relative to the *Ibex*; Mr. Cox in his "Travels in Switzerland," Vol. II. has had recourse to those authorities; and has added some remarks of his own; his article therefore, it may be presumed is the most complete, that hitherto has been published on this subject.

"As this animal is extremely rare, and inhabits the highest and almost inaccessible mountains, the descriptions of it have been very inaccurate and confused. But a new light has been lately thrown on this subject by Dr. Girtanner of St. Gallen, and by M. Van Berchem, secretary to the Society of Sciences at Lausanne; and although these two naturalists differ in some instances, yet their joint labours have assisted in ascertaining the nature and œconomy of this curious animal. The following account, therefore, of the Bouquetin, is drawn principally from their observations in Rozier's Journal, and from additional information obligingly communicated to me by M. Van Berchem himself.

"This animal is now chiefly found upon that chain which stretches from Dauphine through Savoy to the confines of Italy, and principally on the Alps bordering on Mont Blanc, which is the most elevated part of that chain.

"The

“ The several names by which the bouquetin is known in different languages, are, in Greek, by Homer and Ælian, Αἰξ ἀγρία. [Most naturalists affirm that Homer calls this animal Αἰξ ἰξάλος, whereas he styles it αἰξ ἀγρία, or the wild goat, adding the epithet ἰξάλος, or wanton.] Latin, *Ibex*, which name has been adopted by most modern naturalists; Italian, *Capra Selvatica*; German and Swiss, *Steinboch*; or Rock-goat; the female, *Etagne*, or *Ybschen* and *Ybschgeiss*, perhaps from the Latin *Ibex*; Flemish, *Wildgheit*; French, *Bouquetin*; anciently *Boucestain*, the German name reversed. Belon named it *Hircus ferus*; Brisson *Hircus Ibex*; Linnæus, *Capra Ibex*; Pennant, the *Ibex*; and Dr. Girtanner, *Capra Alpina*. I have adopted the name of Bouquetin, because it is the provincial appellation of the animal in the Alps.

“ The systematic naturalists agree in taking the specific character of the Bouquetin from the beard, and the horns, which they describe as knobbed along the upper or anterior surface, and reclining towards the back.

“ The male Bouquetin is larger than the tame goat, but resembles it much in the outer form. The head is small in proportion to the body, with the muzzle thick and compressed, and a little arched. The eyes are large, round, and have much fire and brilliancy. The horns large, when of a full size weighing sometimes 16 or 18 pounds, flattened before and rounded behind, with one or two longitudinal ridges, and many transverse ridges; which degenerate towards the tip into knobs; the colour dusky brown. The beard long, tawny, or dusky. The legs slender, with the hoofs short, hollow on the inside, and on the outside terminated by a salient border, like those of the chamois. The body short, thick, and strong. The tail short, naked underneath, the rest covered with long hairs, white at the base and sides, black above and at the end. Space under the tail in some tawny, in others white. The coat long, but not pendent, ash-coloured, mixed with some hoary hairs; a black list runs along the back; and there is a black spot above and below the knees. Its colour, however, like that of other animals, must necessarily vary according to its age and local circumstances.

“ The female has been little noticed among naturalists. She is one third less than the male, and not so corpulent: her colour is less tawny: her horns are very small, and not above eight inches long. In these, and in her figure, she resembles a goat, that has been castrated while young. She has two teats, like the tame she-goat, and never has any beard, unless, perhaps, in an advanced age.

The young ones are of a dirty grey colour, and the list along the back is scarcely discernible.

“ There is a stuffed specimen of the male Bouquetin of the Alps in Mr. Parkinson's, late Sir Ashton Lever's Museum.

“ In a state of tranquillity, the Bouquetin commonly carries the head low; but in running holds it high, and even bends it a little forward. He mounts a perpendicular rock of fifteen feet at three leaps, or rather three successive bounds of five feet each. It does not seem as if he found any footing on the rock, appearing to touch it merely to be repelled, like an elastic substance striking
against

against a hard body. He is not supposed to take more than three successive leaps in this manner. If he is between two rocks which are near each other, and wants to reach the top, he leaps from the side of one rock to the other alternately, till he has attained the summit. He also traverses the glaciers with rapidity; but only when he is pursued, for otherwise he avoids them.

“The Bouquetins feed, during the night, in the highest woods: but the sun no sooner begins to gild the summits, than they quit the woody region, and mount, feeding in their progress, till they have reached the most considerable heights. They betake themselves to the sides of the mountains which face the east or south, and lie down in the highest places and hottest exposures; but when the sun has finished more than three quarters of its course, they again begin to feed, and to descend towards the woods; whither they retire when it is likely to snow, and where they always pass the winter. The bouquetins assemble in flocks, consisting at the most of ten, twelve, or fifteen; but more usually in smaller numbers. The males which are six years old and upwards, haunt more elevated places than the females and younger bouquetins; and as they advance in age are less fond of society; they become gradually hardened against the effects of extreme cold, and frequently live entirely alone.

“In summer they feed principally on the *genipi*, and other aromatic plants which grow in the high alps; and in winter they eat the lichens, and brouse on bushes and the tender shoots of trees. They prefer those spots where the dwarf birch and alpine willows grow, and where *rhododendron*, *thalictrum* and *saxifrages*, abound.

“The Bouquetins having their fore legs somewhat shorter than the hind legs, naturally ascend with greater facility than they descend; for this reason nothing but the severest weather can engage them to come down into the lower regions; and even in winter, if there are a few fine days, they leave the woods and mount higher.

“Winter is the season of love with them, and principally the month of January. The females go with young five months, and consequently produce in the last week of June, or the first of July. At the time of parturition they separate from the males, retire to the side of some rill, and generally bring forth only one young, though some naturalists affirm that they occasionally produce two.

“The common cry of the Bouquetin is a short sharp whistle, not unlike that of the chamois, but of less continuance; sometimes it makes a snort, and when young bleats.

“The season for hunting the Bouquetin is towards the end of summer, and in autumn, during the months of August and September, when they are usually in good condition. None but the inhabitants of the mountains engage in the chase; for it requires not only a head that can bear to look down from the greatest heights without terror, address and sure footedness in the most difficult and dangerous passes, and to be an excellent marksman, but also much strength and vigour, to support hunger, cold, and prodigious fatigue.

“The

“ The female shows much attachment to her young, and even defends it against eagles, wolves, and other enemies; she takes refuge in some cavern, and presenting her head at the entrance of the hole, thus opposes the enemy.

“ It is not improbable that the *hircus ferus*, or bouc-estain of Belon, the bouquetin of the Alps, the Siberian ibex, and the ægagrus, both so accurately described by Pallas, and the tame goat in all its different forms, are only varieties of the same species. Perhaps also the *capra caucasica*, described by Pallas, from the papers of Guldenstaedt, and which he represents as differing from the ægagrus, with which it has been confounded by some naturalists. See Act. Petr. for 1779.

“ The horns of the Bouquetin, as has been before observed, are sometimes found to weigh sixteen or eighteen pounds, to be three feet in length, and to have twenty-four transverse ridges.

“ Buffon extends the goat genus still further, and comprehends under it even the chamois, conjecturing that the bouquetin is the male in the original race of goats, and the chamois the female. The French naturalist having, at the time when he described the bouquetin, never seen it in a full grown state, was probably induced to entertain this opinion from a faint resemblance between the female bouquetin and the chamois. But there does not seem the least foundation for this notion, the chamois being an animal totally distinct from the goats, never coupling with them, and judiciously classed by Pallas and Pennant in the genus of antelopes. His conjecture, however, that the bouquetin is the original source of all the tame goats seems to be well founded; and has been adopted by the greatest part of succeeding naturalists. And as, according to the just observations of Pallas, the ægagrus approaches nearer than the bouquetin to the tame goat in its form and horns, the ægagrus may be the link which unites the bouquetin and the tame goat.

“ If these observations should be well founded, the goat genus, or race of the bouquetin, is found in a wild state along the chain of mountains that traverses the temperate parts both of Europe and Asia; on the Pyrennees and Carpathian mountains; on the Taurus and Caucasus; on the mountains of Siberia and Tartary; in Kamtschatka; on the islands of the Archipelago; in Hedsjeas in Arabia; in India; perhaps in Egypt and Lybia.”

The reader will observe from these accounts, that the Rock-Goat feeds on plants sufficiently distinct from the nature of *corn*, insomuch that *corn* can never be considered as the food allotted by providence for the support of its young. Also, that the time of its gestation is *known*—being five months.

The above accounts also justify what is said on 1 Sam. xxiv. 1. of the hunting of David by Saul:—but, *direct* proof is still wanting of the affectionate constancy of the female *Ibex*, which, it has been supposed might be the reference intended in

in *Prov. v. 19.* However, the general nature and habits of both sexes of this Rock-Goat are undoubtedly so similar, that the *circumstantial* evidence to this effect is little short of *positive* testimony: and till a better explanation be offered, the view of it given in the plate referred to, is at least intitled to consideration, if not to confidential reception.

Moreover, it may be remarked, that PENNANT informs us, that "the females at the time of parturition *separate from the males*, and retire to the side of some rill, to bring forth." This looks as if the females *usually* kept company with the males; and where the creature is scarce, it is probable they associate in pairs. Neither is this probability diminished by observing that the female *Iber* has usually one kid, very rarely two. This, if admissible, sets aside the objection of MICHAELIS, who says, *Quest. No. LXXXI. p.152.* "The only passage, where *Ioleh* may appear not to agree with the *Iber*, is *Prov. v. 19.* But this difficulty may be removed, if it be possible, or customary, among the Orientals, to consider the female *iber* as an emblem of a beautiful woman: but I cannot conceive how an animal so uncomely can, in any language, be adopted as an image of the fair sex."

There is another species of *Iber* whose horns are smooth, not having those knots which occur in the Alpine kind. It inhabits the mountains of *Caucasus* and *Taurus*, all *Asia Minor*, and perhaps the mountains of *India*. It abounds on the inhospitable hills of *Laar* and *Khorasan* in Persia. It is an animal of vast agility. Monardus saw one leap from a high tower, and fall on its horns; then springing on its legs, and leaping about without having received the least hurt. PENNANT, from whom the above is taken, thinks this creature may be the origin of the tame goat. Perhaps the tame goat may be derived from both, as it appears certain that the offspring of the *Iber* and the female goat is fruitful. The female of this kind is either destitute of horns, or has very short ones.

The figure on our Plate, is that of a full grown male *Iber* from RIDINGER. Mr. Cox says, this "is the best representation of the bouquetin of the Alps which has fallen under my observation." He adds his testimony to the general correctness of RIDINGER's animals, in which we cordially agree with him.

The horns above are from ROZIER's Journal, where they are given by Dr. GIRTANNER; but as Mr. Cox has compared the sizes of several horns, we shall add his remarks.

"The horns being so remarkable a part of this animal, I shall here add the measurement, not only of those belonging to Mr. Parkinson, but of several pairs which are deposited in the British Museum,

" Dimensions

" Dimensions of the horns in Mr. Parkinson's, late Sir Ashton Lever's Museum, (n. 1.) and in the British Museum.

	No. 1.		No. 2.		No. 3.		No. 4.		No. 5.		
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	
Rectilinear direction, or chord, from the root to the tip	2	1 $\frac{1}{2}$	1	9	2	0	1	8	{	1	6
Arc, or length measured along the curvature	2	8	2	6 $\frac{1}{2}$	3	6	3	0		1	4
									{	3	9
										4	2
Circumference at the base	0	9 $\frac{1}{2}$	0	3	0	10 $\frac{1}{2}$	0	9		0	9
Distance between them at the base ..	0	0 $\frac{1}{2}$	0	1	..	..	..	..		0	0 $\frac{1}{2}$
Distance between them at the tips ..	1	9 $\frac{3}{4}$	2	2							
Number of transverse ridges	24		12		20		24				

" It is a common notion of the hunters, adopted by many naturalists, that the age of a Bouquetin may be estimated by the number of transverse ridges or knobs in the horns. M. Van Berchem, however, assures me, from his own observations, that this is a vulgar error; and that its age can only be ascertained by the number and form of the teeth, as in sheep and goats. This mistake has also occasioned its term of life to be supposed much longer than it really is. This animal increases in bulk to the age of four years; according, therefore, to the system of the Count de Buffon, that the age is about seven times the growth; its life is twenty-eight or thirty years.

" Some naturalists are of opinion, that the diminution of the race of bouquetins in the Alps is owing to his size, the monstrous length and weight of the horns, which impede him in his course; because he is driven into places where he can scarcely procure sufficient nourishment during great part of the year, where his sight becomes debilitated, and is frequently lost by the strong reflection of the sun from the ice and snow. They consider this animal rather as a native of the sub-alpine regions, which are covered during summer with the finest herbage, and where the bouquetins and chamois probably pastured in tranquillity, when only the lower vallies and plains were inhabited.

" On the contrary, it is maintained by others, that the bouquetin is endued with strength proportionate to his size; and though he is inferior to the chamois in liveliness and agility, yet he is by no means deficient in activity; that his horns, though large and weighty, yet from their reclined position do not seem to be any impediment, but rather render him essential service when he happens to fall, or purposely throws himself down precipices to avoid his pursuers. They add also, that his natural food is rather lichens than herbs; that he is particularly fond of the young shoots of trees and shrubs: and that in all places where he inhabits, he is found in the coldest and rudest mountains, and on the steepest rocks. From these circumstances, it is not improbable, that his present situation

and

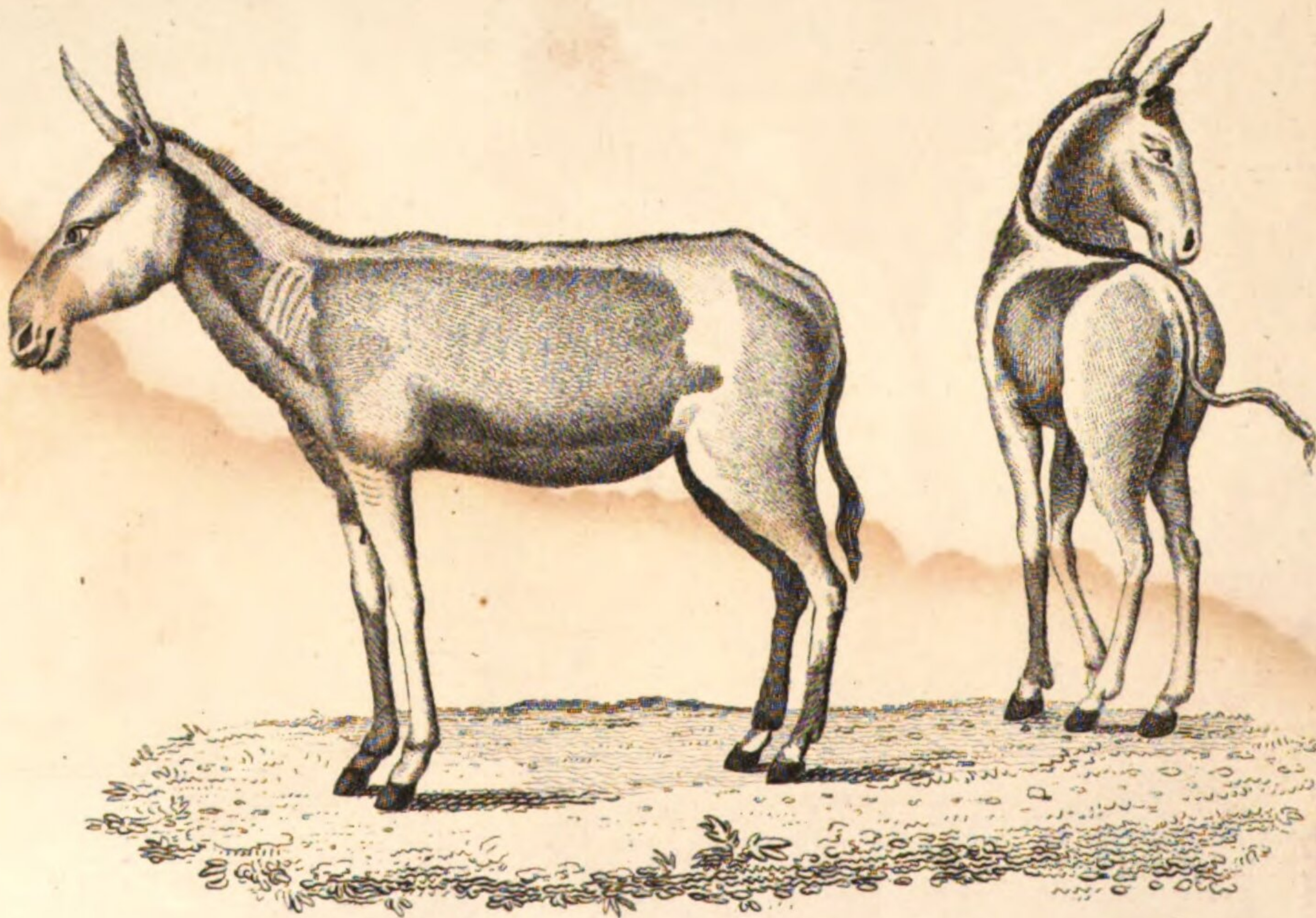
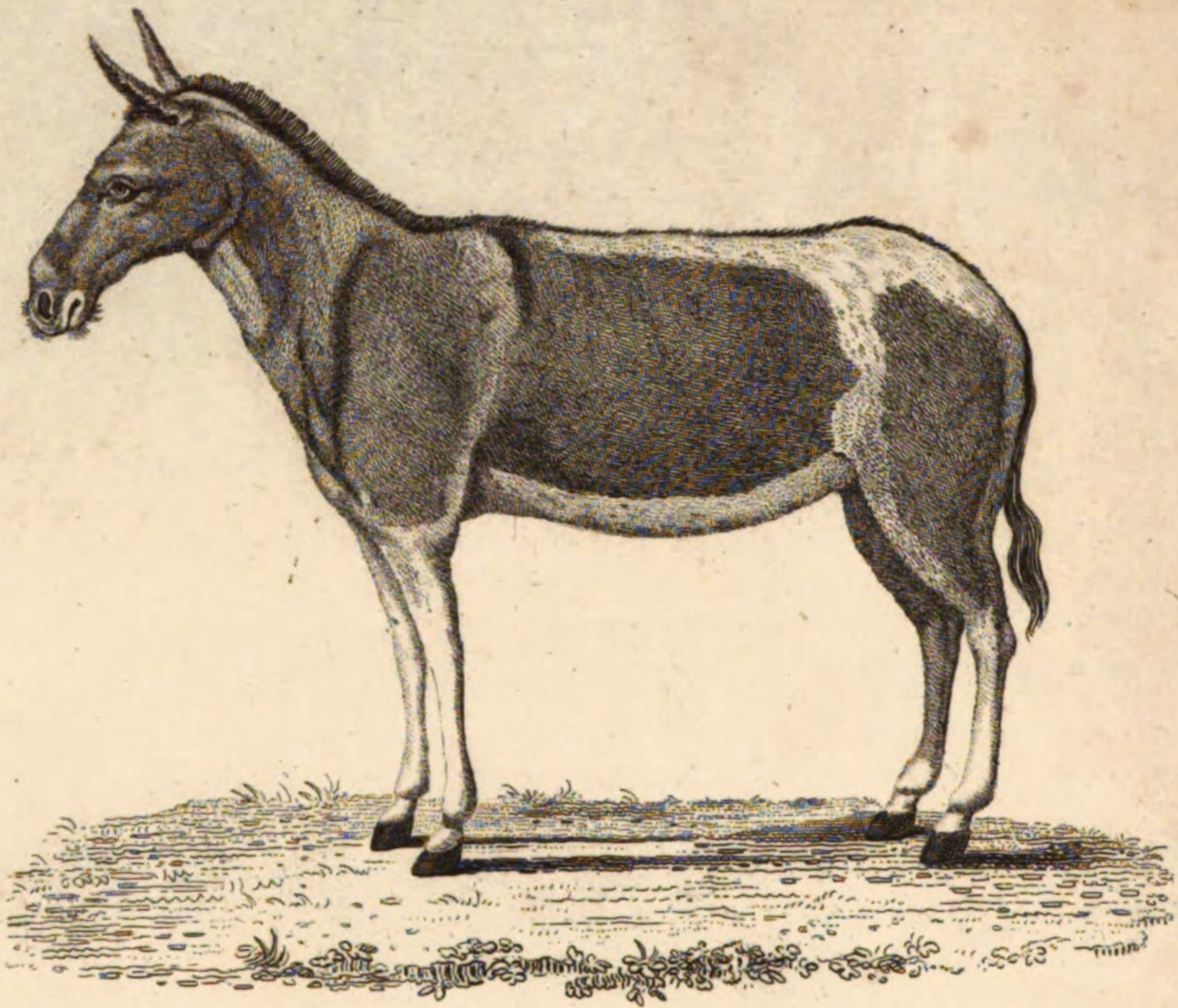
and manner of life is an effect of nature rather than necessity. Besides, why do the chamois, who are more hunted than the bouquetin, still inhabit the less elevated regions; and why are they not driven into the glaciers?

As the *Ibex* has been confounded with the *Roebuck* by some, and with the *Chamois* by others, including even BUFFON. I shall add the distinctions between the two latter animals, as given by Dr. GIRTANNER.

1. By size: being much larger.
2. By the horns. The longest horns of the *Chamois* are only nine inches: those of the *Ibex* are three feet. The horns of the *Ibex* incline backward, over the hinder parts of the animal; those of the *Chamois*: contrary to the horns of most animals, stand forward, are inclined outward, and bend backward into a hook, at their extremities. The horns of the *Chamois* are round: those of the *Ibex* are grooved.
3. The female of the *Chamois* has four teats; the female *Ibex* has only two.
4. The *Ibex* taken young may be domesticated; which the *Chamois* cannot be.
5. The *Ibex* has one young one; the *Chamois* has two.
6. The *Ibex* is bearded; the *Chamois* is not.

Our translators have inserted the *Chamois*, where it is evidently improper, *Deut.* xiv. 5. The Hebrew word is *tzamor*; which the LXX. render *Cameleopardalis*; to this the Vulgate agrees, and what is extraordinary the Arabic says the same, rendering *Ziraffe*. The *Ziraffe*, or *Giraffe*, however, being native of the Torrid Zone, and of southern Africa, it is equally unlikely, from its attachment to hot countries that it should be abundant in Judea, and used as an article of food, as that the *Chamois*, which inhabits the chilly regions of mountains only, and seeks their most retired shades, to shelter it from the warmth of summer, preferring those cool retreats where snow and ice prevail, should be known among the population of the tribes of Israel. It is probable we must yet wait for a conclusive opinion on this animal, the *tzamor*; but, I think the class of antelopes bids fairest to contain it, though Mr. PARKHURST rather inclines to seek it among the *goat* kinds; and he thinks that it may be called *tzamor*, which signifies to *cut off*, or to *prune*, from its *brouzing on the shoots and twigs of plants*, whereby it prunes or breaks them off. At any rate, the *tzamor* must have been a common animal in Syria; as we can by no means suppose the sacred legislator would prohibit from being used as food, a creature hardly seen from century to century, and of which the nature and history were at best but dubious, and barely to be ascertained, by the most skilful naturalists; such however, was the case with the *Cameleopardalis*, whose very existence was admitted with hesitation, a hundred years ago, though its figure appears on certain ancient medals, and on the Prenestine pavement, which demonstrates that the ancients had seen and known the animal. *Vide* FRAGMENT, No. CCLXXXVIII. p. 187, and Plate.





WILD ASS ONAGER.

ON THE WILD ASS, AND OTHER ASSES OF THE EAST.

It will readily may observe, in several places of this work, a distinction made between the kinds of Asses mentioned in scripture. The public opinion seems to have failed in discriminating the kinds, though it appears from the terms used, that the common, or ordinary breed, the term *she-zai*, and *atun*, the last is descriptive of a sex, but not of a race, which would be both kinds. It seems more likely, however, that the original word should mean a race, and the sentiment is supported by the following authorities.

There are, three words referred by translators to the ass. 1. *she-zai*, which in the usual appellation, and denotes the ordinary kind. 2. *paux*, rendered *Onager*, or wild Ass. 3. *atun*, rendered *she-zai*.—To these we must add, 4. *onagris*, rendered *wild-asses*, Dan. v. 21. and 5. *orkin*, rendered *young asses*, Isaiah xxx. 6, 24.

DESCRIPTION OF THE ONAGER, OR WILD-ASS.

From the Accounts collected by Professor PALLAS from the Papers of the late Professor GÜRTL.

*Extracted and translated from Rozier's Journal de Physique,
Vol. xxi. Supp. 1782.*

AFTER observing that very few travellers mention this animal, the Professor proceeds to remark, "Nevertheless, it is a fact well supported by the unanimous testimonies of the Asiatic Nomades, or wandering herders, the trading caravans which come from *Bukharia*, and those persons escaped from slavery whom I have occasionally questioned on the subject, that the *Onagers*, or wild-Ases, known by all Asiatics under the name of *Kautan*, are still very numerous in the deserts of Great Tartary. They come annually in great troops, which spread themselves in the mountainous deserts east and north of Lake Aral. Here they pass the summer, and assemble in the autumn by hundreds, and even by thousands, in order for their return towards India: where they seek an asylum against winter. A passage of *Beckers* (*Rychnow*, Vol. V. p. 113. 300.) seems to trace this migration east on the south of India; but certainly Persia is the ordinary retreat of the troops of *Onagers*, and on the mountains around Cashin they are found at all times of the year. All my inquiries to procure one failed. To the use of the late Professor *Gürtel*, who died

Jon, Chapter xxx. Para. 3.



PLATE 10. DONKEYS.

ON THE WILD ASS: AND OTHER ASSES OF THE EAST.

THE reader may observe, in several places of this work, a distinction made between the kinds of Asses mentioned in Scripture. Our public version seems to have failed in discriminating the kinds, though it employs beside the term *Ass*, implying the common, or ordinary breed, the terms, *wild-Ass*, and *she-Ass*; the last is descriptive of a *sex*, but not of a *race*, which includes both sexes. It seems more likely, however, that the original word should mean a *race*; and this sentiment is supported by the following authorities.

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JOB, Chapter xxxix. Verse 5.

on

on his return from this expedition, we owe our knowledge of the true *Onager*: especially from a female and a colt which his attendants brought to Petersburg.

The Persians call this animal *Kourhan*, and *Ischaki*, or mountain-Ass; because he prefers the most arid deserts of the mountains. They, as well as the Tartars, hunt it in various manners: the Tartars for the sake of its flesh, which is considered as delicious; but the Persians, in order to take it alive, as young *Onagers* so taken, sell for a high price to the great men of the country, for their studs.

From the stock of these tamed *Onagers* proceeds that noble race of asses which serve for the saddle in Persia, Arabia, and Egypt. They are sold for 75 ducats; and Taverner, [lib. iv. cap. 3.] says, that fine ones are sold in Persia dearer than horses, even to 100 crowns each. He well distinguishes them from the baser race of ordinary asses, which serve to carry loads: and the strange whim which the Persians still retain, according to him, of *painting these saddle-asses RED*, as is also practised in Egypt, with henna, seems to explain the fanciful *red-headed* asses of India, of which Elian speaks, [Hist. Anim. lib. ix. cap. 5.] LE BRUYN and ADANSON have not less commended these saddle-asses, the issue of *Onagers*; and all travellers into the Levant have praised them. Like the wild *Onager*, these asses of the superior race are extremely swift, and rapid in their course; of a slender form, and an animated gait.

The quality which principally renders them esteemed, is their support of fatigue, in which they greatly excel the horses of the Tartars; and they are quicker than camels. Mr. NIEBUHR states the progress of a saddle-ass when walking a steady pace at 1750 double paces of a man, in half an hour; whereas the larger camels make only 975, and the smaller at most 1500. *Voy. Arab.* p. 311.

The animal which we had at Petersburg, which had been caught when very young, though of small stature, and probably stunted in growth by its captivity, and by want of suitable food, travelled from Astracan to Moscow (1400 werstes) with the ordinary post, without any other repose than that of a few nights, she also travelled from Moscow to Petersburg, (730 werstes) and did not seem to have suffered by this journey; though she died in the autumn following, apparently from the effect of the herbage of a marshy soil, and the cold and humidity of so northern a climate. She had nothing of the dulness and stupidity of the common ass. The *Onagers* are animals adapted to running, and of such swiftness that the best horses cannot equal them. All the ancient writers do justice to their swiftness; and their Hebrew name (*parad*) expresses this quality. As the *Onagers* prefer the craggy mountains, they run with ease on the most difficult ground. the soft soil of Petersburg was soon prejudicial to our *Onager*, whose hoofs cracked, and fell away in shivers.

The Nomades of Asia report of these *Onagers*, that the first of a troop which sees a serpent, makes a certain cry, which brings all his companions around him, when each of them strives to destroy the serpent instantly. They do the same to beasts of prey.

The

The troops of *Onagers* are conducted by a leading stallion. They have their sight, hearing, and smelling, equally good, so that it is impossible to approach them in an open country. . . The female *Onager*, I remarked, often passed two days without drinking, especially in moist weather, or when very heavy dews fell. She also preferred brackish water to fresh; and never drank of what was troubled. She loved bread sprinkled with salt, and sometimes would eat a handful of salt. I was told, that when at Derbent, she always ran to drink of the Caspian sea, though fresh water was nearer to her. She also selected plants impregnated with saline particles. . . or those of bitter juices. She loved raw cucumbers; and some herbs which she refused when green pleased her when dried. She would not touch odoriferous, or marsh plants, nor even thistles. I was informed, that the Persians when taming the young *Onagers*, feed them with rice, barley, straw, and bread. Our animal was extremely familiar, and followed persons who took care of her, freely, and with a kind of attachment. The smell of bread strongly attracted her; but, if any attempt was made to lead her against her will, she shewed all the obstinacy of the ass: neither would she suffer herself to be approached behind, and if touched by a stick, or by the hand, on her hinder parts, she would kick; and this action was accompanied by a slight grumbling, as expressive of complaint.

The male *Onager*, which was bought at the same time as the female, but which died in the voyage from Derbent to Astrachan, was larger, and less docile. His length from the nape of the neck to the origin of his tail was 5 feet; his height in front, 4 feet, 4 inches; behind, 4 feet, 7 inches; his head 2 feet in length; his ears 1 foot; his tail, including the tuft at the end, 2 feet 3 inches. He was more robust than the female; and had a bar, or streak, crossing at his shoulders; as well as that streak which runs along the back, which is common to both sexes. Some Tartars have assured me that they have seen this cross bar double in some males.

Our *Onager* was higher on her legs than the common ass; her legs also were more slender, than those of the ass; and she resembled a young filly: she could also scratch her neck and head easily with her hind foot. She was weak on her fore legs, but, behind, she could very well support the heaviest man. Notwithstanding her state of exhaustion, she carried her head higher than the ass, her ears well elevated, and shewed a vivacity in all her motions. The colour of the hair on the greater part of the body, and the end of the nose, is silvery white; the upper part of the head, the sides of the neck, and the body, are flaxen, or pale isabella colour; this colour does not spread over the front legs, but along the thighs, to the middle joint. The mane is deep brown; it commences between the ears, and reaches to the shoulders; its hair is soft, woolly, 3 or 4 inches long, like the mane of a young filly. The coat in general, especially in winter, is more silky and softer than that of horses, and resembles that of a camel. The Arabs, no less than the Tartars, esteem the flesh of the *Onager*; and the Arab writers, who permit the eating of its flesh, make the same difference

ference between this ass and the domestic ass, as the Hebrews did, whose law did not permit the coupling of the *Onager* with the she-ass, as being of different kinds.

The skins of the *Onagers* are sought by the *Bukharians*, for the making of shagreen. *Rauwolf* says the same of those of Syria, whose skins are brought to Tripoli." Such is the account of the celebrated Professor; and such his description of an animal, of which he was the first to communicate correct information to the learned of Europe.

That the wild-Ass was known and valued for its *mettle*, appears from a passage in Herodotus, (Pol. lxxxvi.) where that writer says "The Indian horse were well armed like their foot; but beside led horses, they had chariots of war, drawn by horses and *wild-Asses*." The reference of these animals to the troops from India, [a province at the head of the Indus, not our Hindoostan,] deserves attention; because the troops of the *Onager* are said by the professor, to "return towards India where they winter." They might then be taken, in such their return, by the hunters, perhaps in considerable numbers.

Aristotle, Hist. l. vi. c. 36. mentions the wild-Ass, which is said to exceed horses in swiftness; and Xenophon says (Cyr. min l. i.) that he has long legs, is very rapid in running, swift as a whirlwind, having strong and stout hoofs. Elian says the same; but that they may be tired, and when taken are so gentle that they may easily be led about. Martial gives the epithet handsome to the wild-Ass.

Pulcher adest Onager.....

Lib. xiii. Epig. 100.

Oppian describes the creature as "handsome, large, vigorous, of stately gait, and his coat of a *silvery colour*." "He has," says he in another place, "a black band along the spine of his back; and on his flanks, patches as white as snow."

St. Chrysostom says (in Catena) "this animal is strong and *untameable*; man can never subdue him, whatever efforts he may make for that purpose." Olympiodorus and Polychronius coincide with this opinion; but Varro, (*Re Rust.* lib. 11. c. 6) affirms, on the contrary, that "the wild-Ass, is fit for labour; that he is easily tamed; and that when he is once tamed, he never resumes his original wildness." Pliny (lib. viii. c. 43) writes, that mules are the offspring of a mare, and a wild-Ass tamed; and Anatolius says expressly, (*in Hippiatric.* c. 14) that it is very useful to domesticate and tame wild-Asses; because the progeny obtained from them is *excellent*." Most of this information is confirmed, in the present article.

Let us now attend to some of those passages, which imply distinct kinds of asses in the Hebrew Scripture.

1. CHAMOR, is the common name for an Ass; such as is employed in labour, carriage, and domestic services. *Vide* Gen. xxii. 3. Abraham saddled his ass—*chamor*. xxx. 43. Jacob had many asses. xxxvi. 24. Anah fed the asses of his father, *et al. freq*

2. The

2. The WILD-ASS, called *Para*, Job xi. 12. "Vain man would be wise though he be born a wild-Ass's colt:" [*oir para*, עֵיר פָּרָא] The more wild the creature here mentioned be supposed, the greater opposition to wisdom is expressed by the simile. If this be fact, very strong indeed is the character attributed to Ishmael, Gen. xvi. 12. "he shall be a wild-Ass man, [*para Adam*, פָּרָא אָדָם] not merely a wild man, as in our translation, but a man rough, untaught, libertine, as a wild-Ass. Nor perhaps is this all; but it may imply further, that as the wild-Ass loves to be at the head of his troop, to order and govern it, so shall Ishmael be desirous of supremacy, and brook no rival. [*Vide* FRAGMENT, No. CCCCLXXXII, p. 192.]

The wild-Ass, *Para*, is said "not to bray over grass," (*green grass*, *Desha*,) Job vi. 5.—and we may connect with this by contrast, the description of a drought by the prophet Jeremiah, xiv. 6. "Insomuch that the Hind [female stag] dropped her calf, in the forest field, and forsook it; to such a degree was *green grass* (*Desha*) wanting: and the wild-Asses (*Paraim*) stood on the rising grounds, blowing out their breath like *taninim* [*vide* on *Lam.* iv.] while their eyes failed, because there was no vegetable of any kind." Both these passages seem to imply, that the wild-Ass feeds in silence, principally on grass, and usually in plenty.—That this *Para* is a creature roaming at large, in the forests, appears from Job xxxix. 5. "who dismissed the wild-Ass to his liberty? and the chains of the *Orud*, who struck off?" This *Orud* will engage our inquiries hereafter.

We have this word in a feminine form, *Pareh*, פָּרָה, Jer. ii. 24. "A female wild-Ass, used to [*lit.* learned in] the wilderness, in her desire snuffeth up the wind of her occasion: who can turn her away? all who seek her, shall they not be tired? in her month they may find her."

Job xxiv. 5. says *Paraim*—"male wild-Asses go forth in the desert;" and the Psalmist, civ. 11. says, springs of water run among the hills [or mountains]: the *Paraim*—wild-Asses quench their thirst at them. The prophet Isaiah describes excessive desolation, by saying, the wild-Asses—*Paraim*—shall rejoice where a city had stood, chap. xxxii. 14. The whole of this evidence attaches to a creature roaming at liberty—in the desert—or on mountains; feeding on grass—blowing out its breath when vexed, and of such swiftness as to weary every pursuer, yet to be found in her—[*return to her former state.* i. e. after the occasion which impels her to such friskiness is over. This seems to be at least as rational, as our rendering of *month*; for what *month* is meant, and what has any month to do with this creature? her pregnancy lasts more than a month: and after delivery does she keep a month? Surely not.]

But, there is another kind of Ass, called in Hebrew ATUN, ATUNUTH, may the same informant contribute to ascertain this also? for we find, that the breed, or immediate descendant of the wild-Ass (which indeed is caught alive for the purpose of obtaining a breed) is excessively valued by the great men of the East, and forms an object of their researches, for their own personal

nal dignity and accommodation. In fact, the high price of these asses excludes them from the purchase of the commonalty, and restricts the possession of them to the great, or the affluent.

Our second breed of Asses, we find then, is called *Atun*, *Atunuth*. Now let us enquire how Scripture alludes to these. *Gen.* xii. 16. Abraham had *Atunuth*. *Numb.* xxii. 23. Balaam rode on an *Atun*; and we find, from information noted above, that that the breed from the *Onager* is very fit for performing a long journey, like that of Balaam; that this kind of ass is endowed with vigorous faculties, so as to discern obstacles readily, is also obstinate to excess, when beaten behind, or when put out of its way, or when attempted to be controuled against its will; and that at the sight of danger it emits a kind of cry: it is also familiar, and attached to its master: these particulars agree correctly with certain incidents in the history of Balaam's ass.

We find Deborah, *Judges* v. 10. addressing those "who rode on WHITE asses; those who sit in judgment;"—men of dignity, no doubt. Agreeably to this, our extract informs us, that the *Onager* is of a *silvery white*, for the most part; and we ought to observe, that the word rendered *white* occurs also (and only) *Ezek.* xxvii. 18. "*white wool*;" now the colour of this kind of wool, seems to correspond exactly to the colour of the animal described by GMELIN; *silvery white*. (N. B. This corrects an error in HARMER, *Vol. II* p. 68.)

From 1 *Chron.* xxvii. 30. we learn that David had an officer expressly appointed to superintend his *Atunuth*; not his ordinary asses, but his asses of a noble race: which implies at least equal dignity in this officer as in his colleagues, mentioned with him.

This notion of the *Atun*, gives also a spirit to the history of Saul, who when his father's *Atunuth* were lost, was at no little pains to seek them:—Moreover, as beside being valuable they were *uncommon*, he might the more readily hear if they had been noticed and *picked up* by any one; and possibly this leads to the true interpretation of the servant's proposed application to Samuel, chap. ix. verse 6. *q. d.* "In his office of magistracy this honourable man may have heard of these strayed rarities being found, and secured by some one, *peradventure he can shew us the way we shall go.*" This keeps clear, both of expected fortune telling, and of the exercise of prophetic prediction, in Samuel, on this occasion; which, I apprehend is desirable. This implies the competence, if not the wealth, of Saul's family.

We have now to remark the allusion of the dying Jacob to his son Judah, *Gen.* xlix. 11. "Binding his fole (*Oireh*) to the vine, and his son of his *Atun* to his vine of Sorek." This idea of a *capital* kind of ass, and of Judah's possessing *young* of the same breed, implies a dignity, or fertility, and a prolongation of both, which does not appear in the usual phraseology of the passage.

Thus we see that these *Atunuth* are found in Scripture in the occupation only of judges, patriarchs, and other great men; insomuch, that where these
are

are there is dignity, either expressed or implied. They were also a present for a prince; for Jacob presented Esau with *twenty*, Gen. xxxii. 15. What then shall we say to the wealth of Job, who possessed a *thousand*! could any greater proof of unlimited prosperity exist? We may enquire also in what part should that country be sought, which had such a troop in it?—where they were so *common*? or where so great a number could well be assembled, pastured, tended, &c.

But we must proceed to notice another word which is rendered wild-Ass, by translators, *Job* xxxix. 5. the ORUD. This seems to be the same as in the Chaldee of *Dan.* v. 21. is called OREDIA (or, ORUDIA) the plural of the former. Mr. PARKHURST supposes that this word denotes “the *brayer*,” and that “the animal is spoken of as *one* only; which proves *Para* and *Orud* to be only two names for the same animal,” in this place;—but, these names *may* perhaps refer to different races, though of the same animal; so that a description of the properties of one may apply to both, admitting a slight variation.

Who hath sent cut free—the *Para*—the wild-Ass?

Or, who hath loosed the bands of—the *Orud*—wild-Ass?

Whose house I have made the wilderness (*solitude*)

And the barren land (—*salt deserts*) his dwellings;

The range of open mountains are his pasture,

And he searcheth after every green thing.

The reader has seen how fond the *Onager* was of salt; and we find a reference to the *saltings*, in the Hebrew here, which is lost in our translation; whether these are salt *marshes*, or salt *deserts*, seems to be of little consequence, as we find salt was an article of which that animal could eat a handful. This greatly adds to the expression and correctness of the Hebrew naturalist. Animals which inhabit the Desert, must often be at a loss for water; and this animal, says the Professor, would often pass two whole days without drinking.

Beside the above, in Daniel we read, that “Nebuchadnezzar dwelt with the *Orudia*—wild asses.” Certainly, this monarch was not banished to the desert, the open mountains, of Job’s *Orud*, but was at most remitted for safety to an enclosure in his own park; in which park curious and exotic animals were also kept, for state and pleasure. If this be correct, then this *Orud* was somewhat at least, of a rarity, at Babylon—and it *might* be of a kind different from the *Para*; as it is denoted by another name. May it be the *Gicquétéi* of professor PALLAS, the “wild-Mule” of Mongolia, which surpasses the *Onager* in size, beauty, and perhaps, in swiftness?”—(*Nov. Comment. Acad. Petrop.* Vol. xix.)—for we remark, that the Professor advises to cross this breed with that of the *Onager*, as a mean of perfecting the species of the ass: consequently, it is allied to this species, and *may* be alluded to in the passage of Job, where it is associated with the *Para*, [unless some other exotic breed of the ass was better known to Job, or in the countries connected with Babylon.]

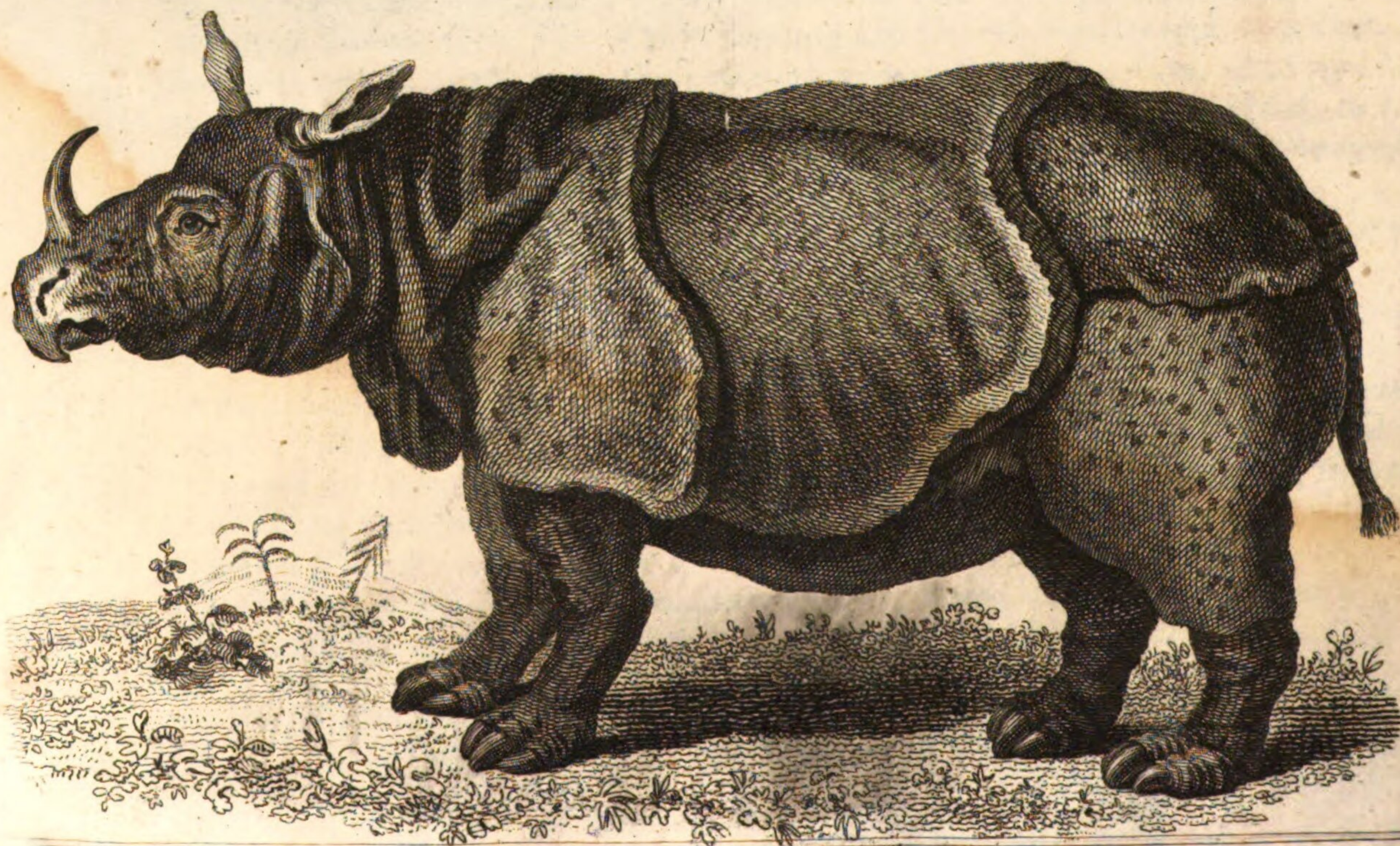
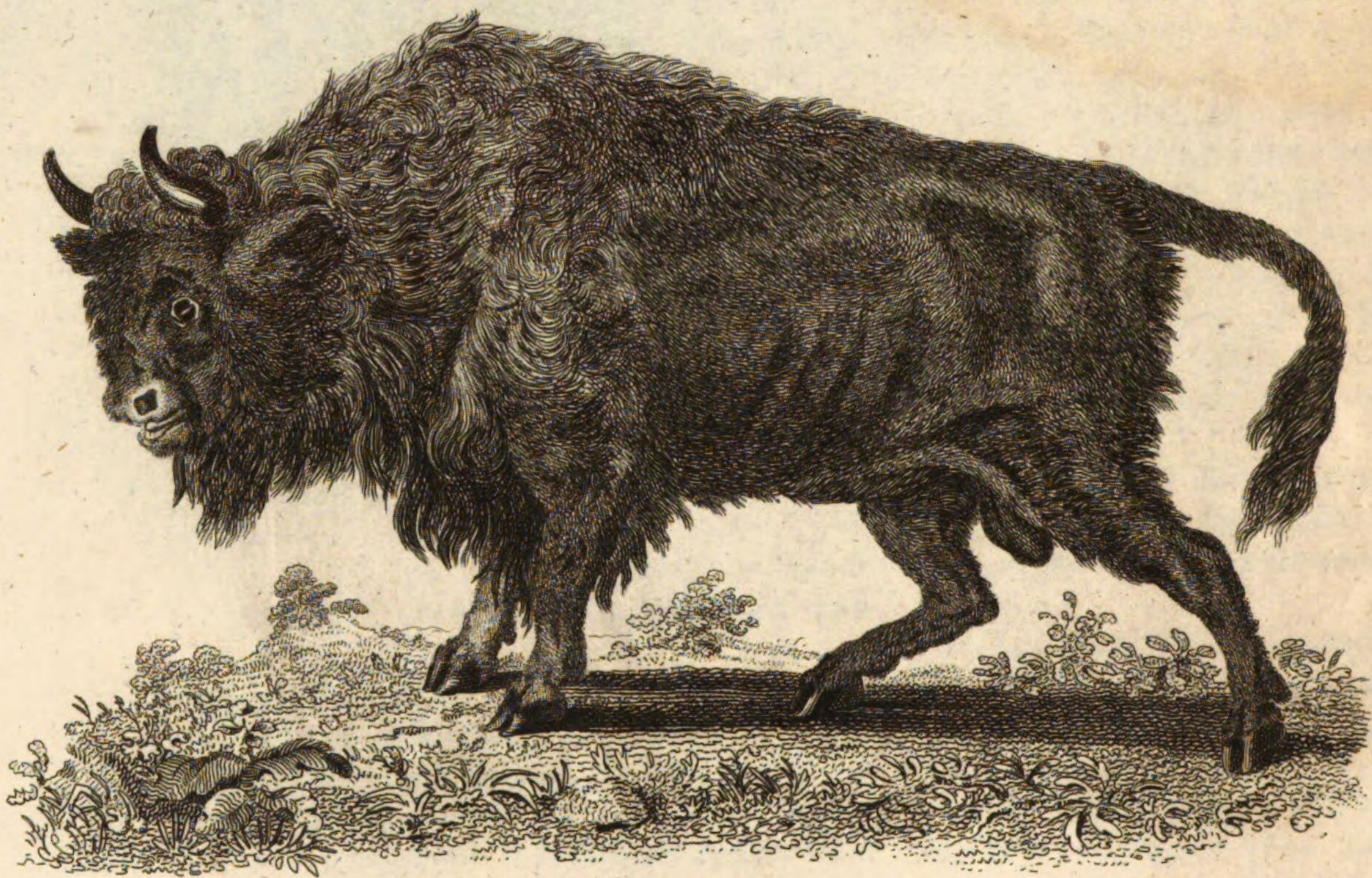
Babylon.] It is the *hemi-onos*, or half ass, of Aristotle; that was found in his days in Syria; and he celebrates it for its swiftness and fecundity (a breeding mule being thought a prodigy). Pliny, from the report of Theophrastus, speaks of this species as found in Cappadocia. Its general description is that of a mule: its colour light yellowish grey, growing paler toward the sides; length from the tip of the nose to the base of the tail 6 feet 7 inches: height 3 feet 9 inches. Inhabits the south of Siberia, the vast plains and deserts of western Tartary, and sandy deserts. Lives in small herds; each male having four, five, or more females. Is absolutely untameable by the Tartars; even those taken young: is proverbial for swiftness; exceeds even the antelope. The history already given of the manners of the *Onager* may supply the rest of the description: as it greatly resembles that animal.

Thus we have proposed those authorities which induce us to adopt a distinction of breeds, or races, if not of kinds, in the ass; and the reader will judge on the propriety of maintaining such a distinction, as countenanced by Scripture, and by Natural History also.

As to the *Oirim*, rendered "young asses," Isaiah xxxvi. 24, we need not suppose that they were a distinct breed, or species: but merely the ass in its state of maturity, strength, and vigour, as they are spoken of as carrying loads, tilling the ground, and assisting in other works of husbandry: yet we cannot help remarking a variation in the manner of spelling this word, which is rather suspicious. In Isaiah xxxvi. 6. it is spelled *Ourim*; in verse 24. we read of *Oirim* labouring the earth in conjunction with oxen; this requires strength, and strength seems to be the character attributed to Ishmael; who was to be the *Oir* of the wild ass, *i. e.* in its state of power, liveliness, and *mettle*—perhaps *restiveness*. This will allow also of a poetical climax in the words of Jacob, *Gen.* xlix. 11. "Binding his *Oireh*—female foal of an ass, at her best estate, to the vine, the common vine, in its best estate, also; and his son of his *Atun* the superior kind of ass, and that most highly valued, to his *SOREK*, the superior kind of grape vine, and that which he most esteemed: here the parallelism is perfect, as well as the climax is regular.

The upper figure on our Plate is the male *Onager*, or wild ass; the lower figures are views of the female. Copied from ROZIER.

* * * I understand, that an ass of the superior breed was brought from Egypt, by the Colonel of one of the Highland regiments which accompanied General ABERCROMBIE on his expedition to that country against the French invaders of it. The newspapers of Edinburgh mention the arrival of the regiment in the month of June, 1802, and notice this creature as being of fine proportions, and standing fourteen hands high. As this regiment passed through part of that city at 6 o'clock in the morning, the corps itself was not seen by all the town; and this ass was seen by still fewer persons, as it was pretty much hid by the troops. Report valued this animal at 1000 guineas.



UNICORN, REEM, RHINOCEROS.





RHINOCEROS. Plate II.

UNICORN, OR RHINOCEROS

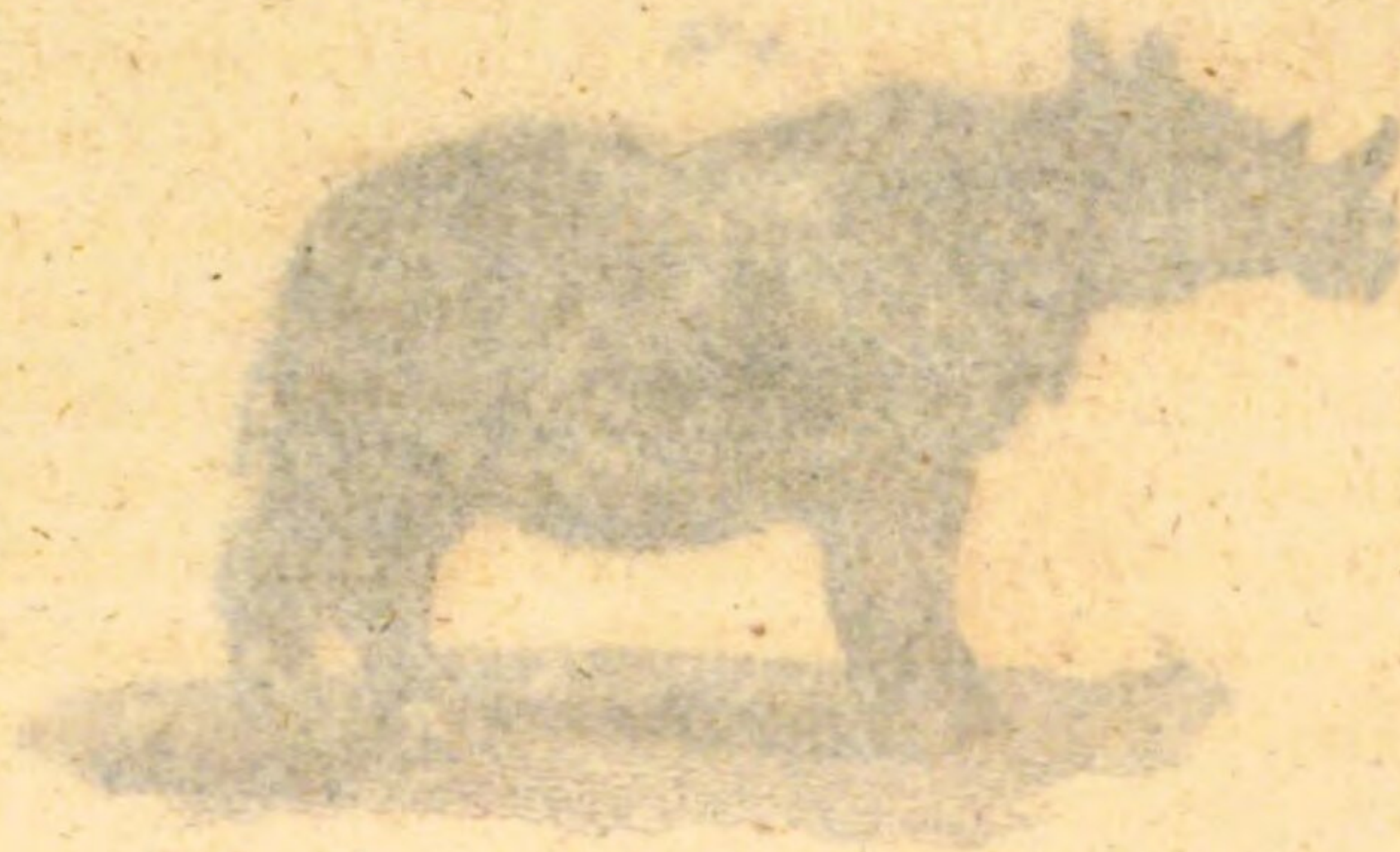
See Chapter xxxix. 9.

Translation of No. XLVII. of the Arabic version of the Hebrew Bible.

NOTWITHSTANDING of what has been said, I have undertaken, such as Herodotus, Pliny, and Strabo, to explain the Hebrew word, *Rhem*, which is translated in the Arabic version by *Rhinoceros*. I have intirely concealed the name of the animal, and have only said, that it is a creature which has taken the form of a bull, for the purpose of the work. I have been in the Hebrew language with a view to the contents hereof with respecting the name of the animal, and the Arabian writer relating to the word *Rhem*. He says, that after having considered what he had seen, he was convinced, that it was really unaccompanied; because he had seen it in the same place, and in the same manner, as the other animals, and distinguished from other horned creatures, and only that it was a bull, which they see wild. However, what seems to be certain is, that the word *Rhem* is translated in the Arabic version by *Rhinoceros*; and that the word *Rhem* belongs to the bull kind, with this difference, that it is a creature which he is to tame it. We see also, that the word *Rhem* implies a great resemblance between him and a bull, since Job is asked, whether he would give the *Rhem* with such or such labours, as were performed by bullocks. The writers will deliver us from all these doubts, and from our ignorance, by giving a correct figure of the *Rhem*, and by describing its nature and its uses. I beg them not to make any mistake, and to be careful of the name of this animal; and to be careful of the name of the animal, Job xxxix. 9.

The following is Mr. Scott's description of the *Rhem*, when the *Rhem* is particularly described.

"The Unicorn, the wild Bull, the Rhinoceros, which appears from the allusion to it in Scripture to be a creature of great strength, with a single horn, and of the bull kind. It is described in Job xxxix. 9. and in the Arabic version, as the Unicorn, which is a bull in the nose, and is a more fiction. Neither can it be the Rhinoceros, which is a more short one, placed under the nose. It is described in the *Tabularium Traditionum* for the year 1743, that it is a creature which hath always a double horn, and is a creature which is mentioned of the Royal Society as a creature which is found in the Cape of Good Hope. But neither of these is the Unicorn, Job, Chapter xxxix. 9.



UNICORN, REEM, RHINOCEROS:

JOB, Chapter xxxix. Verse 9, &c

Translation of No. XLVI. of Michaelis's "Questions proposed to the learned Travellers in Arabia."

"NOTWITHSTANDING so many labours which truly learned men have undertaken, such as *Bochart*, *Ludolph*. and *Schultens*, to explain the import of the Hebrew word, REEM, or RAAM, [רֵאֵם or רֵאֵם] that import remains still almost intirely concealed from us. The last mentioned writer seems to be the only one who has taken the right road, for the discovery of the truth. Without loading the Hebrew language with a new animal, already well known to us, he contents himself with reporting whatever he has been able to collect from the Arabian writers relating to the word *Reem*. He confesses, however, for himself, that after having considered what he produces, the animal referred to continues equally unascertained; because, no one of the writers has given a methodical description of it, nor has mentioned those characters, whereby it may be distinguished from other horned creatures, and especially from our bulls, when they are wild. However, what seems to be certain is, that *Golius* has badly translated the Arabic *Reem* by *Dorcas*; and that the animal denoted by this term belongs to the bull kind, with this difference, that it is absolutely impossible to tame it. We see also, that the sacred text supposes a great resemblance between him and a bull; since Job is asked, whether he would dare to entrust the *Reem* with such or such labours, as were performed by bullocks. The travellers will deliver us from all these doubts, and from our ignorance, by bringing a correct figure of the *Reem*, with a methodical and circumstantial description. I beg them not to forget the manners, the swiftness, and natural ferocity of this animal; and to compare it carefully with the passage, Job xxxix. 9, &c."

The following is Mr. SCOTT's note on the passage of Job, where the *Reem* is particularly described.

"*The Unicorn*] *the wild Bull*. The Hebrew name is *Reem*, which appears from the allusions to it in Scripture to be a creature of great strength, with high and terrible horns, and of the beeve kind. *Numb.* xxiii. 22. xxiv. 8. *Deut.* xxxiii. 17. *Psal.* xxii. 13, 22. xxix. 6. xcii. 11. *Isaiah* xxxiv. 6, 7. It cannot therefore be the *Unicorn*, which is a *fish* in the North seas. The *land Unicorn* is a meer fiction. Neither can it be the *Rhinoceros*, which hath but one horn, and that a very short one, placed just over the nose. We learn from Dr. Parsons, in the *Philosophical Transactions* for the year 1743, that there is in Africa a species of rhinoceros that hath always a double horn upon the nose. The Doctor produced to the members of the Royal Society a double horn of this creature brought from the Cape of Good Hope. But neither Job nor the writer of the

JOB, Chapter xxxix. 9.

poem

poem can be supposed to have heard of such an animal; nor will this circumstance of a double horn intitle it to the description of the *Reem*. Neither is it the *Arabian Reem*, which is a species of *roe*, and a weak timid animal. It is most probably the *wild Bull*, bred in the Syrian and Arabian deserts; which answers perfectly well to the character of the *Scripture Reem*. The Arab poets are very copious in their descriptions of the hunting of this animal, and borrow many images from its beauty, swiftness, strength, and the loftiness of its horns. They represent it as a very fierce and untameable beast, white on the back, with large shining eyes. The reader however ought to be informed, that one of the Arabian poets joins it with the *roes*; perhaps because they are both wild creatures. Damir, their great naturalist, in the chapter which he intitles *Of the wild Bull*, describes no other than a *wild Stag*. But so Cæsar speaking of the *Urus*, of the black forest in Germany, calls it *bos cervi figura*,—a *beeve shaped like a stag*. Schultens in *loc. Hieroz.* p. i. 965, 966. Clodius in his *Lex. Select.* says, that the *Reem* occurs nine times in the Hebrew bible; and that its name is derived from רֵם *altum esse*, on account of the tallness of its stature or the loftiness of its horns. The *Reems* are in effect called *wild bulls* by the Psalmist, *Psalm xxii.* For those whom he stiles *bulls of Bashan*, i. e. of the mountains of Bashan, ver. 13. he calls *Reems*, ver. 21. as though they were synonymous terms. In short the *Reem* must be supposed to be of the *beeve kind*; since it is represented in our author's description as qualified by its make and strength for the business of agriculture like the tame ox."

"or abide by thy crib?] The original may be rendered, *or will he lie all night on thy threshing floor?* i. e. to guard it. Mr. Merrick has made it appear probable, that bulls were in the earliest ages employed, as dogs, to guard fields. Oxen are actually put to this use by the Hottentots."

Mr. PARKHURST has also taken this side of the question; and he thus expresses his opinion.

"As a noun רֵם and (Ps. xcii. 11.) רָאִים, plur. רָאִים, the name of an *horned animal*, Deut. xxxiii. 17. Ps. xcii. 11.; remarkable for his *strength*, Numb. xxiii. 32; and of the *beeve kind*, with which he is mentioned, Deut. xxxiii. 17. Psal. xxix. 6. Isa. xxxiv. 7. In short, the name seems to denote the *wild bull*, so called from his *height and size*, in comparison with the tame. The above cited are all the passages wherein this noun occurs; and the LXX. constantly render it *μονοκερος*, the *unicorn*, except in Isa. xxxiv. 7, where they have *αδραιοι*, the *big*, or *mighty ones*. But that it cannot possibly mean an *unicorn* (if indeed there ever existed such an animal as that is usually described to be), it is evident from Deut. xxxiii. 17. where it is said of Joseph, קַרְנָיו, *his horns*, (are) קַרְנֵי the horns of a רֵם, *with them he shall push the people (to) the ends of the earth*, וְהָם, and these (*two horns* namely, are) *the ten thousands of Ephraim, and the thousands of Manasseh*, i. e. the *two tribes* which sprang from Joseph. The Vulg. in Psal. xxix. 6. 11. xcii. 11. Isa. xxxiv. 7. renders it after the LXX. by *unicornis*, but in Num. xxiii. 22. Deut. xxxiv. 17. by *rhinocerotis*, the *rhinoceros*. Several learned men, and among the rest, *Scheuchzer*, embrace this latter interpretation. But first,

first, though it is certain that some *rhinoceroses* have (See *Shaw's Travels*, p. 430, note 1; *Buffon*, tom. ix. p. 334.) *two horns*, yet many of them have but *one*, and this being placed on the nose, and bended back towards the forehead, is not formed for *pushing* (נָגַח) but for *ripping up* the trunks or bodies of the more soft and succulent trees, and reducing them into a kind of laths, which constitute a part of the animal's food. (See *Bruce's Travels*, Vol. V. p. 91.)

“It is inconsistent therefore with the import of Deut. xxxiii. 17. to explain רָאִם by the *rhinoceros*. 2dly. Notwithstanding the remark of *Scheuchzer*, Numb. xxiii. 22. there seems no sufficient reason to think that the *rhinoceros*, which is a native (See *Buffon's Hist. Nat.* tom. viii. p. 135. tom. ix. p. 339, 340.) only of the *southern regions of Asia and Africa*, was so much as known to the Israelites in the days of Moses, or even of David.

“I apprehend with the learned *Bochart*, and others, that רָאִם, which occurs Job xxxix: 9, 10, and plur. רָאִים, Ps. xxii. 22, denote the same kind of animal as רָאִם; and indeed in the Psalms, more than thirty of Dr. *Kennicott's* codices read רָאִים. The description of Job represents the רָאִם to be a very strong, fierce, and untameable creature, and implies him to be of the *beeve* kind (See *Scott's* notes); and the רָאִים in Psal. xxii. 22. are mentioned as having *horns*, and correspond to the *bulls* and *strong bulls* of Bashan, ver. 3. And since the orthography of these words רָאִים and רָאִים shews them most properly to belong to רָאִם or רָאִים, they may serve to confirm the relation between that root and רָאִם above noted.”

The reader is now in possession of the strongest arguments and facts known in favour of their system when these gentlemen wrote. Since that time Dr. *ANDERSON* has described in his *Recreations in Agriculture*, a much larger animal of the *beeve* kind, than had been supposed to exist, which he calls the *Arnee*. As the Dr's information is derived from the reports of a vessel which picked up a floating carcase of this immense animal in an inundation of the Ganges, the habits, and nature of the creature remain unknown; his size and figure only could be determined; and it is said his height was 12 to 14 feet, and his other dimensions answerable to so great a height.

Is it possible that the forests of the East should contain a creature of this prodigious bulk, which though obscurely, and but lately, known to us, was well known in the days of Job; and which formed an object of comparison, and of poetical description, among Arabian writers? Is he, or was he, extant in Persia, for instance, so that the writer of the book of Job depicts one animal whose residence was to the west of him, (the *leviathan*, or *crocodile*) and another whose residence was east of him? (the *Arnee*).

It is but fair to mention the possibility of this reference, before we consider some hints in the foregoing extracts; and submit arguments on the other side of this inquiry.

The Arabian description of an antelope, or a deer, can never apply to the *reem* of Holy writ: but if the *reem* of the *beeve* kind was *really* known to the Arabian writers, how happens it, that all their descriptions of this terrific animal terminate in a gazelle, or a stag?

Observe,

Observe also, that though the *sea* unicorn cannot possibly be the *reem* of Job, yet it does not follow that the *land* unicorn is a fable: we have in BARROW's Travels in Southern Africa, page 313, a partial delineation of him, and presumptive evidence of his existence, [as a gazelle, not a bull.]

Observe, that though what animals are extant in southern Africa only, may safely be considered as unknown to Job; yet proofs of their restrictions to those countries must be produced, before we can admit the impossibility, or improbability, of his being informed of them, from some other part of the world.

This militates effectually against the observations of Mr. PARKHURST, that the double-horned Rhinoceros was known ONLY in the *southern regions of Asia and Africa*, since certainly he was known to the Romans, who never penetrated to those southern regions; and we have the testimony of Mr. BRUCE that he inhabits the forests of Ethiopia, in the north of Africa, whence he might easily be known, and well known too, in Egypt, and from Egypt, in Arabia.

We are sure that the Romans had great commerce with Africa, and received from thence many cargoes of wild beasts: among them was the Rhinoceros with two horns; this, I say, we suppose they received from Africa, for to suppose they received it from Asia, would infer the probability of its being still better known in Arabia, and, by consequence, to Job, than it is fair, at present, to infer.

The mention of the DOUBLE HORNED Rhinoceros as known at Rome, leads to a reflection on the hyper-criticism of *Bochart*, who would vary a line of *Martial*, Spect. Epig. lib. iv. No. 82.

*Namque gravem gemino cornú sic extulit Ursum,
Jactat ut impositas Taurus in astra pilas.*

in which the poet says, "the Rhinoceros tossed up a heavy Bear with his double horn;" to

Namque gravi geminum cornú sic extulit Urum.

"the Rhinoceros tossed up two wild Bulls with his strong horn:" this *emendation* misled both Mr. Maittaire, and Dr. Mead, for a time.

Besides this testimony of *Martial*, we have the Domitian medal, in which the figure of the Rhinoceros has *two horns* on the nose, very plainly: and the decisive authority of *Pausanias*, who says he saw it at Rome. "I saw also the *Ethiopian BULL*, which is also called *Rhinoceros*, because a horn projects from the end of his nose, and a little ABOVE it, another [*καὶ ἄλλο ὑπὲρ αὐτοῦ ἔμεγα*] not large; but it has none on its head." [This description is correct; which I notice, because Mr. TAYLOR in his translation of *Pausanias* has made his author say, "a horn projects from the extremity of its *nostril*, and another *small one* UNDER it:"—which is contrary, as well to probability, as to nature.]

These authorities demonstrate that the *double horned* Rhinoceros was known anciently in Rome:—and if in Rome, why not in Egypt? since he is extant in Ethiopia:—and if in Egypt, why not to the writer of the book of Job? since this is clearly the African species.

We

We are now prepared to consider what answers may be given to the objections of Mr. PARKHURST, &c. as 1. that the Rhinoceros stands connectedly distinguished from the beeve kind in Sacred Scripture. Answer, he might even be reckoned by the Arabians, &c. in the days of Job, among the beeve kind, since Pausanias, who was many centuries later calls him "*the Ethiopian BULL*" [ταυρος της τε Αιθιοπικης] or "*the bull of Ethiopia*," as if he were known in Ethiopia by the name of a *bull*: but this name would not alter his character, or his form; the creature though called a bull, and ranged among the beeve kind, might nevertheless be the Rhinoceros.

2. The strongest argument of Mr. Parkhurst, is, that the Rhinoceros does not *push* with his horns, as the Reem is said to do, but *rips up* boughs of trees, &c. into laths. In answer, it may be queried, whether the import of the Hebrew word *negur*, on which Mr. P's argument is founded, is not fairly and correctly expressed by the *extulit* of Martial; for *negur* properly signifies to drive forward, to propel: some have rendered it by to *toss up*, to *elevate*; and *extulit* signifies to *take up*; but then we may suppose the Rhinoceros did not *carry* the bear on his horns, but endeavoured to *jerk* him as high as he well could, while counteracted by the resistance and struggles of his antagonist. Now, this is precisely what a bull would have done; no bull—a wild bull, especially, would, strictly speaking, *push* his enemy, (which enemy is not understood to be a fellow bull, but of another kind) but he would endeavour to thrust his horn into the body of his adversary, and would endeavour to throw him over his back; so far there is a resemblance in the action of these creatures: yet there must be a difference; for Jacob says, with these *two* horns, acting at the same instant, as I understand it, shall he push:—this, Martial informs us, was strictly true of the double horned Rhinoceros, who, taking the bear on both his horns, threw him up; but whether a bull would throw with both horns at the same instant, I do not certainly know; but from the divergence of his horns, should suppose he would not, at least he would not in regard to such little balls as the poet conceives his bull might throw; for he seems to say, "The Rhinoceros having raised the bear on his horns, or got him fairly on his two horns, threw him up (*extulit*), as easily as a bull would throw up little balls placed on his head." So that, on the whole, the action of the Rhinoceros as described by this ancient writer, may stand as a comment on the action which Jacob attributes to his *Reem*.

3. As to the domestic labours, &c. mentioned by way of *antiphrasis*, as not to be entrusted to the *Reem*, they suit the Rhinoceros quite as well as the *Urus*; since the Rhinoceros when of full age, is perhaps as untameable and untractable, as any creature living. "In Bengal, Siam, and other southern parts, of India, where the Rhinoceros is perhaps, still more common than in Ethiopia, and where the natives are accustomed to tame elephants, he is regarded as an irreclaimable animal, of which no domestic use can be made." Buffon's note, *art. Rhinoceros*.

Let

Let us now attend to modern information in relation to the Rhinoceros. The first correct intelligence we had of this creature, was from Dr. Parsons, in Phil. Trans. Vol. xlii. p. 523. who gave drawings, &c. of a young one, supposed to be only two years old: with this paper he gives delineations of a double horn, then in Sir Hans Sloane's Collection. The Dr. resumed the subject in Vol. lvi. p. 32. on occasion of a double horn, then recently received by Dr. Mead. Mr. Bruce mentions the animal as found in Abyssinia; and Dr. Sparrman depicts him in south Africa. We find him also in the East Indies; and have a description and delineation of him, Phil. Trans. Vol. lxxxiii. p. 8. &c. by Mr. Bell, Surgeon to the East India Company. Buffon and other naturalists, have given figures of the *single horned* Rhinoceros only; but it is much to be wished that men of learning and talents, would exercise toward each other that liberality to which they are respectively intitled: when we read the reflections of Sparrman on Buffon, or those of Bruce on Sparrman, we are ashamed of reading what those authors should have been ashamed of writing:—because animals differ in different countries, therefore their *describers* are not worthy of credit, !! &c. &c. To me it appears that the north African species of folding-skin Rhinoceros has usually a single horn;—nevertheless *some* are found having two horns; then, I observe, the Rhinoceros of Bencoolen (East India) has much less of those folding skins, but has two horns; then, that the south African Rhinoceros has no folding skins, yet has two horns. Now, in this gradual diminution and disappearance of the folding skin, what is there contrary to nature? It is true, this may distinguish *different species*;—but if so, why should naturalists blame each other? Why not accept each other's information with gratitude? If nature has this variety, where is the crime of reporting it?

RHINOCEROS, REEM, UNICORN. PLATE I.

The upper figure shews the URUS, or wild Bull, of the forests of Poland. This animal is of great force and magnitude, and of long life. “It grows to a size, that scarcely any other animal but the elephant is found to equal. The female exceeds the largest of our bulls in size.” It is very wild, irritable, and violent; but whether any of the beeve kind may be truly said to be *untameable*, may, I think, be doubted, since this kind seems to be peculiarly designed by Providence, for the companion of man, in all his states of civilization; and in all parts of the world.

The lower figure shews the RHINOCEROS, of the ordinary, or at least, of the best known, species, having but one horn. The contradiction is equally great in the LXX. whether they designed to describe a bull, having two horns, by the name of MONOCEROS, i. e. *ONE-horned*; or whether they designed the double-horned Rhinoceros: but, when we consider that a wild Bull having only one horn, would be contrary to the nature of the beeve kind, and indeed would be a monster; whereas a *Unicorn*, or single horned Rhinoceros, would suit some passages of

of Scripture, and be perfectly well known to their readers; while another species of Rhinoceros having two horns, would suit other passages of Scripture, where a similar animal was meant, and this also was known to their readers; we cannot but approve of the choice they made in preferring the Rhinoceros to the Urus, as the animal intended by the Hebrew *Reem*. We consider also this choice, and this opinion, of the Egyptian translators, (who certainly knew full as well as modern writers can know the animal most likely to be described by the sacred poet) as no despicable authority on this side of the question.

PLATE II. DOUBLE HORN OF THE RHINOCEROS.

The *DOUBLE horn* of this creature, being that part of his figure which has been most called in question, and which stands most in need of authorities, to elucidate its nature and form, we have collected on this Plate several delineations of this particular article.

Fig. 1. A copy of the Domitian medal, in which the double horn of this creature is distinctly apparent; it is said to be apparent also on the Prenestine pavement, made in the time, and perhaps by the order, of Sylla the dictator.

2. The head of the double horned Rhinoceros, from Mr. BRUCE; who tells us, that this species in Abyssinia differs little, or nothing, in any other respect from the single-horned kind. Mr. BRUCE's figure is a close resemblance to BUFFON's; for which this observation may account.

3. The head of the double-horned Rhinoceros from Mr. BELL's account, in the Philosophical Transactions. This figure differs essentially from that of Buffon and Mr. Bruce; in nothing more than in the almost total absence of the folding skins: but we have copied the head only.

No. 4, A double-horned Rhinoceros, in which the folding skins are by no means obliterated, though they are very much diminished from those of Mr. Bruce's figure. From Harris's Voyages, Vol. I. p. 465. He ranks it as an East Indian kind; though he quotes Kolben, who was among the first who mentioned the double horned species, as native of South Africa. We have given this at full length, because, by comparing it with the second figure in the former Plate, the diminution of the folding skin is very discernable. This instance agrees sufficiently with that given by Mr. Bell: which is yet considerably smoother, and has, in fact, very slight traces, that any folding skin appertains to the genus; of which characteristic appearance it would never have raised any suspicion, had this species only been known.

No. 5. Double horns delineated by Dr. Parsons, from Sir Hans Sloane's Collection. "Whether they crossed each other on the animal, is uncertain. It is most likely they did not, but that by drying they were crossed by the corrugations of the skin that joins them together. However, I have drawn them as they appeared to me. The straight horn is TWENTY-FIVE inches long; the curved one somewhat shorter; and the two diameters of the bases THIRTEEN inches."

From

From this account both horns appear to be nearly equal in strength, power, magnitude, &c. The Dr. mentions a horn in Sir Hans's collection THIRTY-SEVEN inches long;—above three feet! Another *thirty-two* inches long:—and Buffon mentions one *three feet eight inches* in length. What formidable weapons are these! equal in length to the horns of many of our English bulls!

No. 6. Horn delineated by Dr. Parsons from Dr. Mead's Collection. "The length of the anterior horn,—measuring with a string along the convex fore part, is *twenty* inches; perpendicular height *eighteen*: circumference at the base *twenty-one and a half*. The posterior horn is in perpendicular height *nine inches and a quarter*; circumference round the base *eighteen inches*; length of both bases together on the nasal bones *fourteen inches*; and the weight of both together *fourteen pounds ten ounces*." Brought from Angola, in Africa.

No. 7. A double horn, from Buffon; the tips not perfect, but the union at bottom very compact.

No. 8. The skull of a double horned Rhinoceros; shewing the connection of the horns with the *os frontis*: from Mr. Bell's figure in the Philosophical Transactions, Vol. lxxxiii. "Both horns were firmly attached to the skull, nor was there any appearance of joint, or of muscles to move them."

No. 9. The figure of one of those horns which are worn in Abyssinia by the soldiery, in triumph after a victory. If there be any probability in the idea that when the *horn* is mentioned in Scripture, it may allude to the wearing of such a token of exultation, or, indeed, on merely common ideas, without such a reference,—is it more likely the allusion should be to the two horns of a bull, which project one on each side of the head, then to a *single* horn erect in the middle of the forehead? If the Psalmist had said, "my *horns* (plural) shalt thou *project sideways*;"—the phrase might have alluded to a bull: but, when he says, "my *horn* (singular) shalt thou *exalt*," or cause to stand erect,—we must seek some other animal as the subject of comparison: because a bull, and the whole beeeve kind is out of the question; in as much as their horns do not *stand erect*; neither are they, in that sense, *exalted*.

The series of double horns here offered deserves notice, as indicating several varieties: in No. 7. they are strongly united: in No. 6. they are pretty closely united at bottom, but not quite: in No. 5. they are somewhat wider asunder; and in No. 8. the distance between them is considerable.

N. B. This inquiry has proceeded on the principle that the *Reem*, or *Rim*, and the *Raam*, are the same animal, though the name be differently spelt: but—does one denote the *unicornis*,—the other the *bicornis*? or—are they different animals?



JAC



JACKALL.

OF THE JACKALL, OR FOX OF SCRIPPS.

WE have elsewhere given our reasons for supposing that the Fox which extremely rare is Jackall, and that it is a species of the same animal. The Jackall is the common name by the Indians, and others, who have an opportunity, we translate from Roxburgh, a fine description of the Jackall, by M. Goussier, 1773.

"The country of the Jackall is Aker Meer, and the country around it. The instinct of this creature leads it to mountains, or high open country to open countries. Yet its boldness is so great, that it not only penetrates into inhabited places, but approaches travellers, who are often surprised when they repose at night under their tents, it even approaches them sometimes, in their journey, for a considerable length of time.

The Jackall is less dangerous than the wolf; he is carnivorous, kills smaller animals, devours carcases, even those of mankind; swallows greedily whatever is made of leather; loves grapes, yet can live long on food, of which fennel, vegetables and bread are the principal parts.

The ears of the Jackall are never erect; which distinguishes it from the fox. The Jackall hardly exceeds the fox in size; in his general appearance he holds a middle station between the wolf and the fox. Goussier mentions some three feet in length; but rarely do Jackalls attain such dimensions.

I do not think the colour of this animal, is so beautiful as others have described it; and certainly, I see not in it the brilliancy of gold. The upper part of the animal is a dirty yellow, deeper on the back, lighter on the sides, which yellow on the belly. The feet are of a red colour, a reddish brown. The tail is of the same colour as the back, black at the tip. The back of the Jackall is marked with four bands, white at the base, then black, then red, and black at the point. The hairs of the tail are white at the base, the rest is black. The length of a Jackall, is about twenty-five inches; height in the hind legs, is about height behind quereen inches and a half; length of the head is about

The figure which we have copied is taken from the painting of Mr. Schwarzen, (Sagittaire,) as resembling to be better than the others, and it accompanies the memoir of Mr. Goussier.

The following is from Mr. Goussier, the younger.

"The Jackall is a carnivorous animal; yet he does not, and however very fat in winter. The Jackalls keep themselves during the day-time in the woods, which are in the neighbourhood of mountains; at night, however, they quit their retreats, and infest the villages, towns, farm-houses, &c. They never appear without some of their associates in company. When they are on the watch for prey, they assume the manner of a creeping animal; stretching out the head,



OF THE JACKALL: THE FOX OF SCRIPTURE.

WE have elsewhere given our reasons for supposing that the true Fox was extremely rare in Judea, and that it is scarcely, if at all, mentioned in Scripture. The Jackall is the creature meant by the Hebrew word *shuol*; and having an opportunity, we translate from ROZIER, a few extracts from the natural history of the Jackall, by M. GULDENSTÆDT, *Nov. Comment. Acad. Petrop. Vol. XX. 1775.*

“The country of the Jackall is Asia Minor, and the regions around it. . . . The instinct of this creature leads it to mountainous, or hilly parts, rather than to open countries.” Yet its boldness is so great, that it not only prowls into inhabited places, but approaches travellers, whether during the day time, or when they repose at night under their tents; it even accompanies them sometimes, in their journey, for a considerable length of time.

The Jackall is less dangerous than the wolf; he is carnivorous, kills smaller animals, devours carcasses, even those of mankind; swallows greedily whatever is made of leather; *loves grapes*, yet can live long on food, of which farinaceous vegetables and bread are the principal part.

The ears of the Jackall are *brown* not *black*; which distinguishes it from the fox. The Jackall hardly exceeds the fox in size; in his general appearance he holds a middle station between the wolf and the fox. GMELIN mentions some three feet in length: but rarely do Jackalls attain such dimensions.

I do not think the colour of this animal, is so beautiful as authors have described it: and certainly, I see not in it the brilliancy of gold. The upper part of the animal is a dirty yellow, deeper on the back, lighter on the sides: whitish yellow on the belly. The feet are of one colour, a reddish brown: The tail is of the same colour as the back, black at the tip. Each hair of the back is marked with four bands, white at the base, then black, then foxy and black at the point. The hairs of the tail are white at the base, the rest is black. The length of a Jackall, is about twenty-nine inches; height in front nineteen inches; height behind nineteen inches and a half: length of the head six-inches.

The figure which we have copied is taken from the German work of Mr. SCHREBER, (*Saugthière*,) as seeming to be better than that which accompanies the memoir of Mr. GULDENSTÆDT.

The following is from Mr. GMELIN, the younger

“The Jackall is a carnivorous animal; yet *he loves fruits*, and becomes very fat in autumn. The Jackalls keep themselves during the day-time in the woods, which are in the neighbourhood of mountains; at night-fall they quit their retreats, and infest the villages, towns, farm-houses, &c. They never appear without some of their associates in company. When they are on the scout for prey, they assume the manner of a creeping animal, stretching out the head,

PSALM lxiii. 10.

the

the better to discover their object: in attacking which, they run with extraordinary rapidity, and surpass the wolf in swiftness.

“Poultry is their natural prey. Their cries during the night are horrible, insupportable, and resemble frightful howlings, which they intersperse with barkings like those of a dog. Many are always heard howling at the same time.”

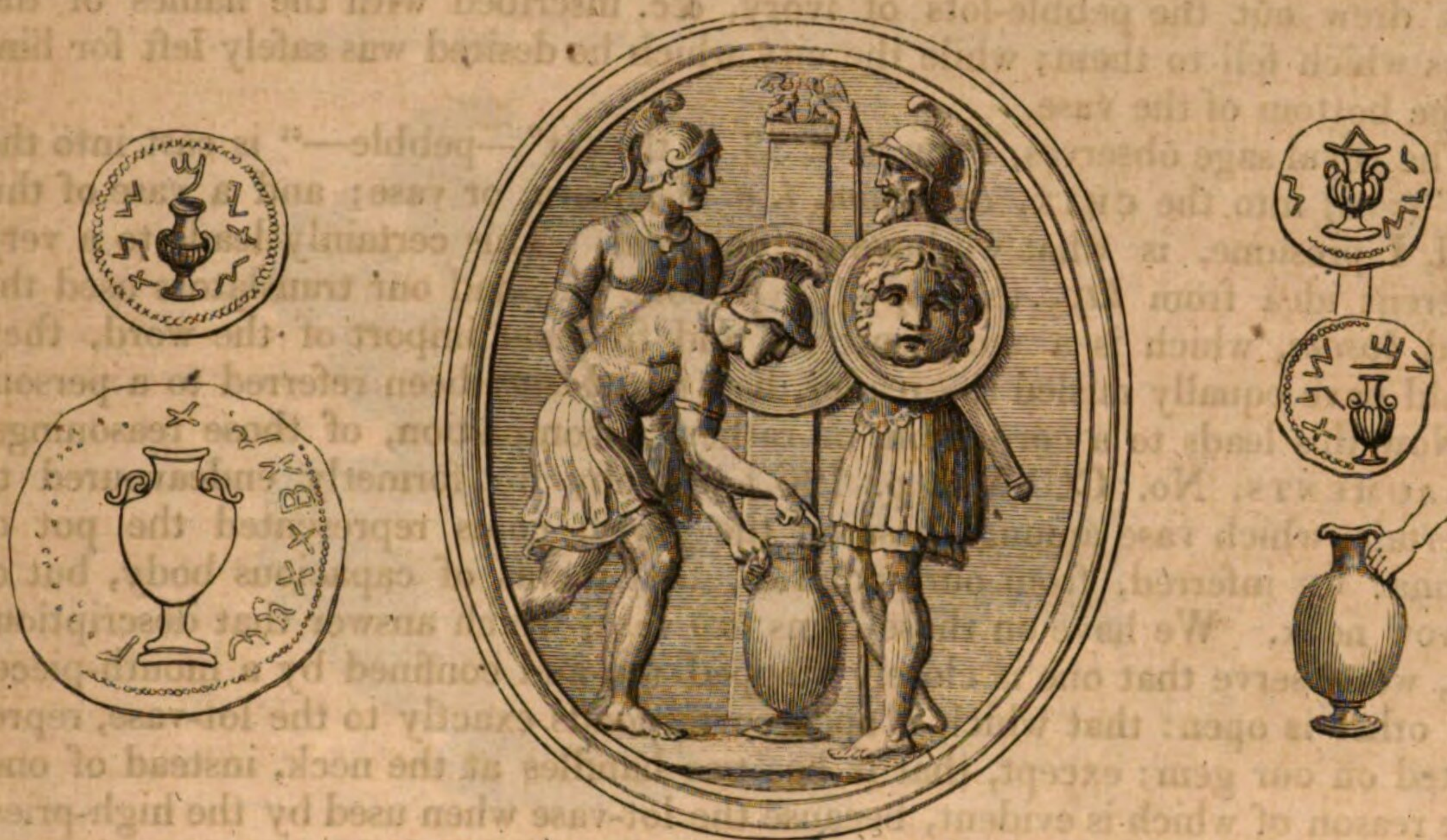
The reader will recollect and compare those passages of Scripture which mention the fox; such as that of the Psalmist, lxiii. 10. who, speaking of his enemies, says, “they shall be a portion for *foxes* :” i. e. the Jackalls shall tear them out of their graves. We have also in these extracts additional evidence that the Jackall is *fond of grapes*, and even gets fat (on fruits, no doubt) in autumn: compare this with Cant. ii. 15.

The following is from Mr. Jackson’s “Account of Morocco:” it strongly distinguishes the fox from the Jackall.

“*Thaleb*.—The animal called Thaleb is the red fox; it emits the same strong scent as the fox of Europe, and is found in all parts of the country; but is far from being so common as the Deeb, which some have compared to the jackall, others to the brown fox.

“It is certain, that the Deeb emits no offensive smell; it is a very cunning animal, and its name is applied metaphorically to signify craft, which it possesses in a greater degree than any other animal: this circumstance alone seems to ally it to the fox species. It is very fond of poultry; and at night, a little after dark, the still air of the country is pierced with its cries, which alternately resemble those of children, and that of the fox. They assemble in numbers, and abound all over the country, particularly *in the environs of plantations of melons and other vinous plants*. Some of these Deebs have longer hair than others, and their skins are particularly soft and handsome. The provinces of Shedma, Haha, and Suse abound with this animal: the Arabs hunt it, and bring the skins to the Mogodor market.”

“The Dubbah and the Deeb resemble each other in their propensity to devour dead bodies; so that whilst the plague ravaged West Barbary in 1799 and 1800, these animals were constant visitors of the cemeteries.”



L O T S.

PROVERBS XVI. 33.

THE subject of the gem before us has been variously explained; it is in the Florentine Gallery, where GORI has referred it to the action of Achilles presenting to Nestor the "double bowl," ("goblet," Pope) in honour of Patroclus, Iliad xxiii. But the circumstances of that story do not agree with this representation. Cowper thus translates the passage:

" . . . the phial still
Left unappropriated Achilles bore
Across the circus, in his hand, a gift
To ancient Nestor
He said, and *placed it in his hands.*"

I rather consider it as an instance of the manner of drawing lots among the Grecians; and the history it refers to is, that of the three heroes who, having conquered three cities, agreed to draw lots, which of them each should possess. Accordingly, the name of each city was written on a pebble (of ivory, marble, or bone) and put into a lot vase: but one of these chiefs wishing to receive a particular city, wrote the name of that city on a pebble-like lump of clay, not on stone, or ivory, or &c. and poured water into the vase, which he knew

PROVERBS xvi. 33.

would

would dissolve the clay. Then he complimented his confederates with the *favour* of letting them draw their lots before he drew his lot; the consequence was, that they drew out the pebble-lots of ivory, &c. inscribed with the names of the cities which fell to them; while the city which he desired was safely left for him at the bottom of the vase.

The royal sage observes, Prov. xvi. 33. "the lot"—pebble—"is cast into the *lap*" (לִפְתֵּי) into the *chik*, or *bosom*, *i. e.* of an urn, or vase; and a vase of this kind, I presume, is what we have on our gem. This certainly leads to a very different idea from *lap*, the lap of a person: yet, had our translators used the word *bosom*, which is a more correct, and frequent import of the word, they would have equally misled the reader, had that *bosom* been referred to a person.

Now this leads to a correction, or rather, a completion, of those reasonings, [FRAGMENTS, No. CCXXX. p. 126.] whereby we formerly endeavoured to ascertain which vase among those on the Jewish coins represented the pot of manna: we inferred, from our enquiries, that it was of capacious body, but of narrow neck. We have on those coins *two* vases which answer that description: but, we observe that one is closely stopped up, and confined by a mouth-piece; the other is open: that which is open corresponds exactly to the lot-vase, represented on our gem; except, that it has two handles at the neck, instead of one. The reason of which is evident, because the lot-vase when used by the high-priest (as in the case of the scape goat) was held up to his hands by proper assistants: whereas this vase stands on the ground.

It should appear every way reasonable, I think, to suppose, that the vase which contained the manna was closed as strongly, and as punctually as possible, in order to prevent evaporation, and to contribute to the preservation of the substance included in it: but no such care could be required on the subject of the lot-vase; on the contrary, that was open of course. If this be just, then we have recovered the forms of two vases used among the ancient Hebrews; the *tjenjenet*, which contained the manna, Exod. xvi. 33. and the *chik*, or vase which was employed in drawing lots. We find the custom of drawing lots was used from the earliest times, by Joshua, chap. xviii: by the High-Priest, Lev. xvi. 8. by Saul, 1 Sam. xiv. 14. &c. &c. to the days of Zechariah, Luke i. 9. and, that they were drawn, by putting the hand into the vase, *vide* in CALMET, the articles AZAZEL, and SIMON the Just.

Query, whether this manner of drawing lots is not alluded to Ezek. xxiv. 6. "Woe to the bloody city,—to the pot whose scum is therein . . . bring it out piece by piece"—as lots are brought out, one by one,—“let no *lot* fall upon it:” *q.* let no portion of it so small as a pebble, or lot, fall back again into the pot, to remain there safely.

The lots which we have remaining from the days of antiquity, are of the nature and size of our die: and the casting of a die, is analogous to the drawing out of a lot, from the lot vase.—But N. B. These were sometimes *thrown*, as dice.

DISH, OR BOWL.

PROVERBS, CHAPTER XIX. VERSE 24.



WE have remarked, on the subject of the words rendered *cruse* by our translators, that one of them seems to be totally different from that which bids fairest to explain the story of the widow's cruse of oil, or king Saul's cruse of water: that word we now mean to examine with design to direct its application.

TJELACHIT (תֵּלַחִית) is used to denote a vessel of some capacity; a vessel to be turned upside down, in order that the inside may be thoroughly wiped, 2 Kings, xxi. 13. This implies, at least, that the opening of such a dish be not narrow, but wide; that the dish be of a certain depth; yet that the hand may readily reach to the bottom of it, and there may freely move, so as to wipe it thoroughly, &c.

This vessel was capable also of bearing the fire, and of standing conveniently over a fire; for so we read, 2 Chron. xxxv. 13. "The priests, &c. boiled parts of the holy offerings in pans—*tjelachut*; and distributed them *speedily* among the people." Meaning, perhaps, that this was not the very kind of boiler which they would have chosen, had time permitted a choice; but that haste, and multiplicity of business, made them use whatever first came to hand, that was capable of the service. This application of these vessels, however, shews that they must have been of considerable capacity and depth; as a very narrow, or a very small dish, would not have answered the purpose required. [Or, was this *speedy* distribution of these viands, because they were best eaten *hot*?]

A kind of dish or pan, which answers these descriptions, appears to be represented in the French work entitled *Estampes du Levant*, plate xiii. in the hands of a confectioner of the Grand Seignior's seraglio, who is carrying a deep dish, full of heated viands (recently taken off the fire), upon which he

PROVERBS, XIX. 24.

has

has put a cover, in order that those viands may retain their heat and flavour. His being described on the plate as a confectioner, leads to the supposition that what he carries are delicacies: to this agrees his desire of preserving their heat: and the shape of the vessel is evidently calculated for standing, &c. over a fire. Moreover, it is capable of being rested on its side, for the purpose of being thoroughly wiped; and a dish used to contain delicacies, is most likely to receive such attention; for the comparison in the text referred to evidently implies some assiduity and exertion to wipe from the dish every particle inconsistent with complete cleanliness. This dish, I suppose, is of earth, or china, or porcelain, rather than of metal.

We are now prepared to see the import of Elisha's direction to the men of Jericho, 2 Kings, ii. 20. "Bring me a new *tjelachit*,"—one of the vessels used in your cookery—in those parts of your cookery which you esteem the most delicate: a culinary vessel, but of the superior kind; "and put salt therein," what you constantly mingle in your food; what readily mixes with water: and this shall be a *sign* to you, that in your future use of this stream, you shall find it salubrious, and fit for daily service in preparing, or accompanying, your daily sustenance.

There is a striking picture of sloth, sketched out very simply, but very strongly, by the sagacious Solomon, Prov. xix, 24.; repeated almost *verbatim*, chap. xxvi. 15.

A slothful man hideth his hand in the *tjelachit*;
But will not re-bring it to his mouth.

A slothful man hideth his hand in the *tjelachit*;—*but*,
It grieveth him to bring it again to his mouth.

Meaning, he sees a dish, deep and capacious, filled with confectionary, sweet-meats, &c. whatever his appetite can desire in respect to relish; of this he is greedy. Thus excited, he thrusts his hand deep into the dish, loads it with delicacies: but, alas! the labour of lifting it up to his mouth is too great, too excessive, too fatiguing: he therefore does not enjoy or taste what is before him, though his appetite be so far allured as to desire, and his hand as to grasp. [This is the customary mode of conveying food to the mouth in the East, where knives and forks are not in use.] He suffers the viands to become cold, and thereby to lose their flavour; while he debates the important movement of his hand to his mouth, if he does not rather totally forego the enjoyment, as costing too great exertion! Surely this picture of sloth is greatly heightened by this notion of the *tjelachit*.

It seems to be sufficiently striking, that two words, rendered by translators *lap*, or *bosom*. [Prov. xvi. 33. and the word before us], should both signify *vases*, or *vessels*. The first denotes the lot-vase, used for containing the lot-pebbles, &c. to be drawn out by the hand: the other a dish for meat; neither of them referring to any part of the person, as our version seems to imply, which reads,

A slothful man hideth his hand in *his bosom*,
And will not bring it to his mouth again.

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CONEY. SHAPHAN. MOUSE.



OF THE SAPHAN, OR CONEY; AND THE MOUSE.

PROVERBS XX.X 26.

EXTRACT FROM THE APPENDIX TO BRUCE'S TRAVELS. P. 139 TO 146.

"THE ASHKOKO."

THIS curious animal is found in Ethiopia, in the caverns of the rocks, or under the great stones in the Mountain of the Sun, behind the Queen's palace at Koscam. It is also frequent in the deep caverns of the rock in many places in Abyssinia. It does not burrow or make holes, as the rat or rabbit, nature having interdicted him this practice by furnishing him with feet, the toes of which are perfectly round, and of a soft, pulpy, tender substance; the fleshy parts of the toes project beyond the nails, which are rather sharp, much similar to a man's nails ill grown, and these appear given him rather for the defence of his soft toes, than for any active use in digging, to which they are by no means adapted.

His hind foot is long and narrow, divided into two deep wrinkles, or clefts, in the middle, drawn across the centre, on each side of which the flesh rises with a considerable protuberancy, and is terminated by three claws, the middle one the longest. The forefoot has four toes, three disposed in the same proportion as the hind foot; the fourth, the largest, of the whole, is placed lower down on the side of the foot, so that the top of it arrives no further than the bottom of the toe next to it. The sole of the foot is divided in the centre by deep clefts, like the other, and this cleft reaches down to the heel, which it nearly divides. The whole of the fore foot is very thick, fleshy, and soft, and of a deep black colour, altogether void of hair, though the black, or upper part of it, is thick-covered like the rest of its body, down to where the toes divide, there the hair ends, so that these long toes very much resemble the fingers of a man.

In place of holes, it seems to delight in less close, or more airy places, in the mouths of caves, or clefts in the rock, or where one projecting, and being open before, affords a long retreat under it, without fear that this can ever be removed by the strength or operations of man.

The Ashkoko are gregarious, and frequently several dozens of them sit upon the great stones at the mouth of caves and warm themselves in the sun, or even come out and enjoy the freshness of the summer evening. They do not stand upright upon their feet, but seem to steal along as in fear, their belly being nearly close to the ground, advancing a few steps at a time and then pausing. They have something very mild, feeble like, and timid in their deportment; are gentle and easily tamed; though, when roughly handled at the first, they bite very severely.

PROVERBS XXX. 26.

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This animal is found plentifully on Mount Libanus. I have seen him also among the rocks at the *Pharan Promontorium*, or *Cape Mahomet*, which divides the *Elanitic* from the *Heroopolitic* gulf, or gulf of Suez. In all places they seem to be the same; if there is any difference, it is in favor of the size and fatness, which those in the Mountain of the Sun seem to enjoy above the others. What is his food I cannot determine with any degree of certainty. When in my possession he ate bread and milk, and seemed rather to be a moderate than a voracious feeder. I suppose he lives upon grain, fruit, and roots. He seemed too timid and backward in his own nature to feed upon living food, or to catch it by hunting.

The total length of this animal as he sits, from the point of his nose to his anus, is $17\frac{1}{2}$ inches. The length of his snout, from the extremity of his nose to the occiput, is $3\frac{3}{8}$ inches. His upper jaw is longer than his under; his nose stretches half an inch beyond his chin. The aperture of the mouth, when he keeps it close in profile, is a little more than an inch. The circumference of his snout around both his jaws is $3\frac{3}{8}$ inches, and round his head, just above his ears, $8\frac{5}{8}$ inches; the circumference of his neck is $8\frac{1}{2}$ inches, and its length one inch and a half. He seems more willing to turn his body altogether, than his neck alone. The circumference of his body, measured behind his fore legs, is $9\frac{3}{4}$ inches, and that of his body where greatest, $11\frac{3}{8}$ inches; the length of his fore leg and toe is $3\frac{1}{2}$ inches; the length of his hind thigh is $3\frac{1}{8}$ inches, and the length of his hind leg to the toe taken together, is 2 feet 2 inches. The length of the fore foot is $1\frac{3}{8}$ inches; the length of the middle toe 6 lines, and its breadth 6 lines also. The distance between the point of the nose and the first corner of the eye, is $1\frac{5}{8}$ inch; and the length of his eye, from one angle to the other, 4 lines. The difference from the fore angle of his eye to the root of his ear is $1\frac{3}{10}$ inches, and the opening of his eye $2\frac{1}{2}$ lines. His upper lip is covered with a pencil of strong hairs for mustachoes, the length of which are $3\frac{5}{8}$ inches, and those of his eyebrows, $2\frac{3}{8}$ inches.

He has no tail, and gives at first sight the idea of a rat, rather than of any other creature. His colour is a grey mixed with a reddish brown, perfectly like the wild or warren rabbit. His belly is white, from the point of the lower jaw, to where his tail would begin, if he had one. All over his body he has scattered hairs, strong and polished like his mustachoes; these are for the most part two inches and a quarter in length. His ears are round, not pointed; he makes no noise that ever I heard, but certainly chews the cud. To discover this was my principal reason for keeping him alive; those with whom he is acquainted he follows with great assiduity. The arrival of any living creature, even of a bird, makes him seek for a hiding-place, and I shut him up in a cage with a small chicken, after omitting feeding him a whole day; the next morning the chicken was unhurt, though the Ashkoko came to me with great signs of having suffered with hunger. I likewise made a second experiment, by inclosing two smaller
birds

birds with him for the space of several weeks; neither were these hurt, though both of them fed, without impediment, of the meat that was thrown into his cage, and the smallest of these, a kind of titmouse, seemed to be advancing in a sort of familiarity with him, though I never saw it venture to perch upon him, yet it would eat frequently, and at the same time, of the food on which the Ashkoko was feeding; and in this consisted chiefly the familiarity I speak of, for the Ashkoko himself never shewed any alteration of behaviour on the presence of the bird, but treated it with a kind of absolute indifference. The cage, indeed, was large, and the birds having a perch to sit upon in their upper part of it, they did not annoy one another.

In *Amhara* this animal is called *ASHKOKO*, which I apprehend is derived from the singularity of those long herinacious hairs, which, like small thorns, grow about his back, and which in *Amhara* are called *ashok*. In Arabia and Syria he is called *Israel's sheep*, or *Gannim Israel*, for what reason I know not, unless it is chiefly from his frequenting the rocks of Horeb and Sinai, where the children of Israel made their forty years peregrination; perhaps this name obtains only among the Arabians. I apprehend he is known by that of *Saphan* in the Hebrew, and is the animal erroneously called by our translators *cuniculus*, "the rabbit," or "coney."

Many are the reasons against admitting this animal, mentioned by Scripture (*i. e.* the *Saphan*) to be the rabbit. We know that this last was an animal peculiar to Spain, and therefore could not be supposed to be either in Judea or Arabia. They are gregarious indeed, and so far resemble each other, as also in point of size, but in place of seeking houses in the rocks, we know the *cuniculus'* desire is constantly sand. They have claws indeed, or nails, with which they dig holes or burrows, but there is nothing remarkable in them, or their frequenting rocks, so as to be described by that circumstance; neither is there any thing in the character of the rabbit that denotes excellent wisdom, or that they supply the want of strength by any remarkable sagacity. The *Saphan* then is not the rabbit, which last, unless it was brought to him by his ships from Europe, Solomon never saw. It was not the rabbit's peculiar character to haunt the rocks. He was by no means distinguished by feebleness, or being any way unprovided with means of digging for himself holes. On the contrary, he was armed with claws, and it was his character to dig such, not in the rock, but in the sands. Nor was he any way distinguished for wisdom, more than the hare, the hedge-hog, or any of his neighbours.

Let us now apply these characters to the *Ashkoko*. He is above all other animals so much attached to the rock, that I never once saw him on the ground, or from among large stones in the mouth of caves, where is his constant residence; he is gregarious, and lives in families. He is in Judea, Palestine, and Arabia, and consequently must have been familiar to Solomon. For David describes him very pertinently, and joins him with other animals perfectly known

to all men: "The hills are a refuge for the wild goats, and the rocks for the *Saphan*," or *Ashkoko*, Psalm civ. ver. 18. And Solomon says, "There be four things which are little upon earth, but they are exceeding wise."—"The *Saphanim* are a feeble folk, yet they make their houses in rocks," Prov. xxx. 24, 26. Now this, I think, very obviously fixes the *Ashkoko* to be the *Saphan*, for this weakness seems to allude to his feet, and how inadequate these are to dig holes in the rock, where yet, however, he lodges. These are, as I have already observed, perfectly round; very pulpy, or fleshy, so liable to be excoriated or hurt, and of a soft fleshy substance. Notwithstanding which, they build houses in the very hardest rocks, more inaccessible than those of the rabbit, and in which they abide in greater safety; not by exertion of strength, for they have it not, but are truly as Solomon says, a *feeble* folk, but by their own sagacity and judgment, and are therefore justly described as wise. Lastly, what leaves the thing without doubt is, that some of the Arabs, particularly Damir, say, that the *Saphan* has no tail; that it is less than a cat, and lives in houses, that is, not houses with men, as there are few of these in the country where the *Saphan* is; but that he builds houses, or nests of straw, as Solomon has said of him, in contradistinction to the rabbit, and rat, and those other animals that burrow in the ground, who cannot be said to build houses, as is expressly said of him.

The Christians in Abyssinia do not eat the flesh of this animal, as holding it unclean, neither do the Mahometans, who in many respects of this kind in abstinence from wild meat, have the same scruple as Christians. The Arabs in Arabia Petrea do eat it, and I am informed those on Mount Libanus also: those of this kind that I saw were very fat, and their flesh as white as that of a chicken. Though I killed them frequently with the gun, yet I never happened to be alone so as to be able to eat them. They are quite devoid of all smell and rankness, which cannot be said of the rabbit.

I have no doubt that the *El Akbar* and the *El Webro* of the Arabs, are both the same animal. The *El Akbar* only means the largest of the *Mus-montanus*, under which they have classed the jerboa. The *Jerd*, and *El Webro*, as also the *Ashkoko* or *Akbar*, answer to the character of having no tail."

Such is the account, and such the opinion of Mr. BRUCE; whose figure, with its feeble feet, occupies the upper part of our Plate. I must acknowledge I think many of his concidences are striking, and might lead to the adoption of his opinion: but before we determine decisively, let us hear the other side. The following extracts are from Mr. PENNANT, *Hist. Quad.* p. 427, &c. *Quarto Edit.*

"The Egyptian Jerboa, with thin, erect, and broad ears: full and dark eyes: long whiskers: fore legs an inch long; five toes on each; the inner, or thumb, scarce apparent; but that, as well as the rest, furnished with a sharp claw; hind legs two inches and a quarter long, thin, covered with short hair, and exactly resembling those of a bird; three toes on each, covered above and below with hair;

hair; the middle toe the longest; on each a pretty long sharp claw: length, from nose to tail, seven inches and one quarter; tail ten inches, terminated with a thick black tuft of hair; the tip white; the rest of the tail covered with very short coarse hair; the upper part of the body thin, or compressed sideways: the part about the rump and loins large; the head, back, sides, and thighs, covered with long hair, ash-coloured at the bottom, pale tawny at the ends: breast and belly whitish: across the upper part of the thighs is an obscure dusky band: the hair long and soft.

“Inhabits Egypt, Barbary, Palestine, the deserts between Balsora and Aleppo, the sandy tracts between the Don and Volga, the hills south of the *Irtish*, from fort *Janiyschera* to the *seven palaces*, where the *Altaic* mountains begin: as singular in its motions as in its form: always stands on its hind feet; the fore feet performing the office of hands: runs fast; and when pursued, jumps five or six feet from the ground: burrows like rabbits: keeps close in the day: sleeps rolled up: lively during night: when taken, emits a plaintive feeble note: feeds on vegetables: has great strength in its fore feet. Two, which I saw living in London, burrowed almost through the brick wall of the room they were in; came out of their hole at night for food, and when caught, were much fatter and sleeker than when confined to their box.

“This is the *Daman Israel*, or the *Lamb of the Israelites* of the *Arabs*, and is supposed to be the *Saphan*, (Bochart displays a vast deal of learning on the subject. *Vide Hierozoicon*, lib. iii. cap. 33. p. 1001.) the “coney” of Holy Writ: our rabbit being unknown in the Holy Land. Dr. Shaw met with this species on mount Libanus, and distinguishes it from the next species. (Travels, 376.) It is also the *mouse of Isaiah*, chap. lxvi. 17. (Bochart, 1015.) This animal was a forbidden food with the Israelites. *Achbar* in the original signifies a male *Jerboa*.

“Middle species; of the size of a rat: of the colour of the former, except that the rump on each side is crossed with a white line.

“There is again a variety of this with a more lengthened nose, shorter ears, and broader; tail thicker, and not so elegantly tufted: the hind legs shorter: the coat longer and thicker.

“This middle species is found only in the eastern deserts of Siberia and Tartary, beyond lake *Baikal*; also in Barbary (*Shaw's Travels*) and Syria, (*Haym's Tesoro Brit.* ii. p. and tab. 124.) and even as far as India, (*Pallas.*)

“These three agree in manners: burrow in hard ground, clay, or indurated mud: not only in high and dry spots, but even in low and salt places. They dig their holes very speedily, not only with their fore feet but with their teeth, and fling the earth back with their hind feet, so as to form a heap at the entrance. The burrows are many yards long, and run obliquely and winding, but not above half a yard deep below the surface. They end in a large space or nest, the receptacle of the purest herbs. They have usually but one entrance; yet by a wonderful

wonderful sagacity they work from their nest another passage to within a very small space of the surface, which in case of necessity they can burst through, and so escape.

"It is singular, that an animal of a very chilly nature, should keep within its hole the whole day, and wander about only in the night.

"They are the prey of all lesser rapacious beasts. The Arabs, who are forbidden all other kinds of mice, esteem these the greatest delicacies: as those people are often disappointed in digging after them, they have this proverb, "To buy a hole instead of a *Jerboa*."

"Animals of this genus were certainly the *two-footed mice*, and the *Egyptian mice*, of the ancients, which were said to walk on their hind legs; and use the fore instead of hands. These with the plant *Silphium*, were used to denote the country of *Cyrene*, where both were found, as appears from the figures on a beautiful gold coin preserved by Mr. *Haym*, (*Tesoro Brit.* ii. 124,) and which I have caused to be copied above the animal, in the plate."

The reader will now judge on the reasons of these Gentlemen respectively. If we admit with Mr. *BRUCE*'s "no doubts," that the *Akbar* is the *Ashkoko*, we may ask, how comes it that the prophet *Isaiah* uses this word to denote the *Saphan*? why does he not call that animal by its usual appellation? On the other hand, he admits, that *Akbar* signifies the largest of the kind of mountain mice, including the *Jerboa*, and this seems to coincide with the opinion of *Bochart*. Beside this, the word *Akbar* is used *Lev.* xi. 29. *1 Sam.* vi. 4, 5, 11, 18. as well as *Isaiah* lxvi. 17. Now it is hardly likely that in all these places it means the *Saphan*, and in some of them it clearly does not.

As the length of tail assimilates the *Jerboa* to the mouse, so the absence of tail in the *Ashkoko* assimilates that animal to the rabbit kind, and therefore I incline to think, that the upper figure on our Plate is that of the *Saphan*, rendered by our translators "coney" and the lower figure (the smaller) is the *Akbar* of Scripture, rendered by our translators "mouse."

I am afraid Mr. *PENNANT* in appealing to the testimony of Dr. *SHAW*, has not correctly understood the Doctor's words, as I think his expressions, "of the same size and quality with the rabbit," &c. can hardly describe the *Jerboa*; nor is the name of *Daman Israel*, "Israel's Lamb," likely to be given to that animal. The following is Dr. *Shaw*'s account: *Travels*, p. 376. *Folio Edit.*

"The *Daman Israel* is an animal likewise of mount *Libanus*, though common in other places of this country. It is a harmless creature, of the same size and quality with the rabbit, having the like incurvating posture and disposition of the fore teeth. But it is of a browner colour, with smaller eyes, and a head more pointed. The fore feet likewise are short, and the hinder near as long in proportion, as those of the *Jerboa*. Though it is known to burrough sometimes in the ground; yet, as the usual refuge of it is in the holes and cliffs of the rocks, we have so far a more presumptive proof that this creature is the *Saphan* of the Scriptures

Scriptures than the *Jerboa*. None of the inhabitants, whom I conversed with, could inform me why it was called *Daman Israel*, *i. e. Israel's Lamb*, according to their interpretation." This gentleman certainly distinguishes the *Daman Israel* from the *Jerboa*, to which he compares it: and his expression "*far more presumptive proof* that this creature is the *Saphan*," agrees with Mr. BRUCE against the *Jerboa*.

I must own I cannot account for its appellation, from the Arabic, in which *Daman* signifies *constant, stable, firm, unmoveable*; unless it refers to the *rocky* habitation of this animal, which is certainly *constant*, and *unmoveable*. I partly incline to derive this name from the Hebrew *Dameh*, importing *quiet, silent, tranquil*, such being the character of a lamb, which "before its shearers, is dumb, and openeth not its mouth;" not even when being slain: but this is a direct opposition to the active character of the *Jerboa*; to which no one could ever think of applying the term *tranquil*, or *patient*, or *STILL*.

The following is HASSELQUIST'S description of the *Jerboa*: translated from his Travels in the Levant.

"*Mus Jaculus*, Leaping Rat. This animal is the size of a large rat. He only uses his hind legs; for which reason he moves only by leaps and jumps. When he stops, he brings his feet close under his belly, and rests on the juncture of his leg. He uses when eating, his fore paws, like other animals of his kind. He sleeps by day, and is in motion during night. He eats corn, bread made of corn, and grains of *Sesamum*. Though he does not fear man, yet he is not easily tamed, for which reason he must be kept in a cage. I saw one at Cairo, which had been so kept during several months. He is found in Egypt, and between Egypt and Arabia. The Arabs call him *Garbuca*; the French who are settled in Egypt, call him *Mountain Rat*."

I shall further assume that the *Achbar* of Isaiah lxvi. 17. is the *Jerboa*, and then we see that the eating of this creature is properly connected with the guilt of eating swine's flesh, and is in direct opposition to a positive precept; Lev. xi. 27. "*Whatsoever goeth upon ITS PAWS, among all manner of beasts that go on ALL FOUR*, those are unclean to you," &c.—It is strange at first sight, how a creature going on *all four*, can be said to go on *its paws*, *i. e.* on two feet only; but the *Jerboa* answers this description precisely; and though it is with propriety reckoned among quadrupeds, yet by its mode of going on its hind feet only, it has been, and still is called a *biped*: *Mus bipes*, *Theophr. Opusc.* 295. *Ælian, Hist. An.* lib. xv. cap. 26. *Mus bipes*, *Pliny*, lib. x. cap. 65.

[There is just such another perplexity a few verses earlier in the same chapter: "all fowls *Eng. Tr.* but rather, all flying creatures) that creep, going on *all four*"—what a confusion of natures! fowls—creeping—all four!! yet this is not only correct, but even technically accurate, so far as we can ascertain the meaning of the ancient terms.]

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The reader will observe, that the uncleanness contracted by touching the carcasses of these animals, required washing of clothes, and lasted till evening: nor can he fail of remarking how effectually difficulties, uncouthnesses, of phraseology and language are dispersed, when the proper object of which they are descriptive is submitted to our observation and inspection.

We conclude these remarks by observing,

1. That the *rat*, *i. e.* the European rat, is not known in Scripture; at least, I am ignorant of any passage where it occurs.

2. That we may safely take the Hebrew word *Akbar* to import the whole of the *Jerboa* kind; which, though forbid to the Israelites, apparently on account of its peculiarity of conformation, [vide the remarks on the distinction between animals, clean and unclean, as marked by the divisions, &c. of the foot] yet was formerly, and still is, eaten by the Arabs as delicious food. The Arabic version, of Isaiah lxvi. 17. renders the word *Akbar* by *Jerboa*; which shews the opinion of that translator; and *Jonathan* in his paraphrase of Lev. xi. 29, certainly understood the word in the same sense, as he speaks of “rats which are black, and red and white.” It should seem moreover, that the mouse was also unknown; but this animal being found wherever mankind has fixed habitations, however scarce it may be in a land of tents, where the residents are shifting abodes almost daily, the inference is not unattended with difficulty. Notwithstanding, if this were just, it would give a very different aspect to the history of the [mice] *Jerboas* which “marred the land” of the Philistines, 1 Sam. vi. 5. and would require a knowledge of the manner in which the *Jerboa* could effect those ravages to which the Philistines allude: but whether as an immediate visitation resulting from the presence of the sacred ark, or from other causes, is not, that I perceive, clearly specified. It is true indeed, that the Alexandrian and Vatican copies of the LXX. mention these mice, in verse 1. but, whether these are not rather notes, as they do not agree in expression, may be doubted; the edition of Alcala wholly omits them: yet *Josephus* inserts the mention of these destructive animals, as being sent by divine anger. Whatever might be the fact in that instance, we are convinced that the *Jerboa*, no less than the mouse, was competent to inflict whatever penalties it had in commission from Omnipotent Wisdom. Nevertheless, this action of “marring the land,” seems to be very fit for the *Jerboa*, a creature which digs its habitation in the sand, &c. something after the manner of our moles, and as these creatures yearly do much mischief in our fields, &c. by digging, and turning up the soil, so might the *Jerboas* do by some analogous activity. Whereas, the *Ashkoko* cannot dig, but inhabits rocks only; and therefore on the whole, we consider this animal as most likely to be the *Saphan* of Holy Writ.

N. B. Dr. SHAW observes, with Mr. BRUCE, that he never saw the *Jerboa* among rocks.



THE FLY.

THE Hebrew language has at least two words for flies; the first is, *Oreb*, Exod. viii. 21. Psalm lxxviii. 45. cv. 31. which those interpreters, who, by residing on the spot, have had the best opportunity of identifying the subject, have rendered the *Dog-fly*; what in Abyssinia is called the *Zimb*. We have formerly given his history, [Vide FRAGMENTS, No. cclxxxiv.] and his disposition is noticed on Isaiah vii. EXPOS. INDEX.

Another word for a fly is, *Zebub*, Eccl. x. 1. and this we have conjectured might be the "great blue-bottle fly," or flesh-fly, which therefore we have given on our plate, but greatly *magnified*, in order to shew the parts of insects belonging to this genus more distinctly.

This genus has many species. BARBUT says, p. 298,

"This is one of the most numerous classes of insects. Variety runs through their forms, their structure, their organization, their metamorphoses, their manner of living, propagating their species, and providing for their posterity. Every species is furnished with implements, adapted to its exigencies. What exquisiteness! what proportion in the several parts that compose the body of a fly! What precision, what mechanism in the springs and motion!—Some are oviparous, others viviparous; which latter have but two young ones at a time, whereas the propagation of the former is by hundreds. Flies are lascivious, troublesome insects, that put up with every kind of food. When storms

EDIT. 2.

PROVERBS xxxi. 28.

impend

impend they have most activity, and sting with greatest force. They multiply most in hot, moist climates; and so great was formerly their numbers in Spain, that there were fly-hunters commissioned to give them chase."

Beside this, we have hazarded a conjecture, whether the *Shemamah* of Malachi, chap. i. 3. might not be a fly of some kind, [the common HOUSE FLY]; and have ventured to suspect some relation between this *Shemamah* and the *Shemamith* of Prov. xxxi. 28. where the sagacious moralist observes, that the insect to which he alludes, *lays hold with her hands*, in a remarkable manner. Perhaps this particular may assist in identifying the creature intended; for it deserves notice, that this quality in the fly has engaged the examination of modern naturalists. Dr. HOOKE in his *Micrography* has given the front foot (rather HAND) of a fly, and has endeavoured to account for the remarkable ability of this creature to walk on smooth surfaces, and even on the *under* surfaces of polished bodies, where other insects could not support themselves.

We have therefore copied in our upper figure, his delineation of the mechanism of a fly's foot; and we subjoin his explanation of it, p. 34. Folio, 1780.

THE FOOT OF A FLY.

"The foot of a fly is the object now before us, consisting of three joints, two talons, and as many pattens, soles, or sponges, as they are called by some: by the wonderful contrivance of which instruments this creature is enabled to walk perpendicularly upwards, even against the sides of glass; nay to suspend itself, and walk with its body downwards on the ceilings of rooms, and the under surfaces of most other things, with as much seeming facility and firmness, as if it were a kind of *antipode*, and had a tendency upwards.

"The two talons are handsomely shaped, in the manner represented A B, and A C, and are very large in proportion to the rest of the foot. The bigger part of them from A to *d*, *d*, is bristled or hairy all over, but from thence towards C and B, the tops or points which turn downwards and inwards, are smooth and very sharp. Each talon moves on a joint at A, whereby the fly is able to shut or open them at pleasure; so that the points B, and C, having entered the pores of any thing, and the fly endeavouring to shut its talons, they not only draw against, and by that means fasten each other, but also pull forwards all the parts of the foot G G, A, D D: and at the same time the tenters or sharp points G G G G (whereof a fly has two at every joint) run into the pores, if they find any, or, on a soft place, make their own way.

"Somewhat of this kind may be discerned by the naked eye in the feet of a *chafer*, and if it be suffered to creep over the hand or any tender part of the body, its manner of stepping will be as sensible to the feeling as to the sight.

"But as the *chafer*, notwithstanding this contrivance to fasten its claws, often falls when it attempts to walk on hard and close bodies, so likewise would the fly, had not nature furnished his foot with a couple of pattens or sponges D D, which we are now going to describe.

"From

“ From the bottom or under part of the last joint of the foot K, two small thin plated horny substances proceed, each consisting of two flat pieces D D. These, about F F, *ff*, seem to be flexible like the covers of a book; whereby the two sides, *ee*, *ee*, do not always lie in the same plane, but may sometimes shut closer, so that each of them can take a little hold. But this is not all, for the bottoms of these sponges are every where beset with small bristles or tenters, like the wire teeth in a *wool-card*, with all their points inclining forwards: by which the two talons drawing the foot forwards, as before described, and the sponges being applied to the surface of the body the fly walks upon, with the points of all their bristles looking forwards and outwards, as expressed in the figure *ooooo*; if the surface of the body has any irregularity, or gives way in any manner, the fly can suspend itself, or walk thereon very easily and firmly. And its being able to walk on glass, proceeds partly from some little ruggedness thereon, but chiefly from a kind of tarnish or dirty smoaky substance, which adheres to the surface of that very hard body; so that although the sharp points on the sponges cannot penetrate the surface of glass, they may easily enough catch hold of the tarnish it has contracted.

“ Some indeed have supposed these sponges filled with an imaginary glue, which fixes the fly, in such a manner as to prevent its falling; but if there was such a sticky matter, 'tis not easy to conceive how the feet could so readily again be loosened, and move so nimbly forwards. And as our senses can furnish us with a rational way of performing this by the curious mechanism of the parts employed, 'twould be wrong to introduce unintelligible explications.

“ The foot is likewise shaded with a growth of hairs which like a brush serves to clean the fly's wings and eyes, an office she employs it in very frequently. And indeed it is a pretty amusement to see her perform this exercise; for first she cleans her brushes, by rubbing her paws one against another, then draws them over her wings, and afterwards under them; and at last concludes with brushing her eyes and head: by which means she cleans away all little particles of dust or smoke, that may cloud her eyes, or settle on her wings.”

After this particular account of such wonderful mechanism, whereby this creature is enabled to excel all others in the art of *taking hold with her hands*, we can only repeat the question, whether this may be the insect meant in the passage referred to? We see clearly that this foot is used by the fly as a *hand*. That the intrusive disposition of the fly, and its fixed adherence, where it had intruded, was remarked among the ancients, appears very strongly from the name which it furnished by assimilation, to persons who officiously thrust themselves into the company of their superiors, and those who wished their absence, by finding means of admittance to entertainments, without invitation, as without a welcome. Such a person the Romans termed *musca*—a *FLY*; the Greeks also termed them *myiai*, *FLIES*. Hence we have in *Plautus*, *Merc.* iii. 26. “ My father is a *fly*, we can go no where without meeting him;” and *Cicero* jocosely says, “ *Puer abige muscas* ;”—“ Boy, drive away the *flies* !” The reader

reader will observe the reference this bears to the other part of the *Shemamith's* character; "she is in king's palaces:" in halls of royal resort, and festivity. Certainly, this remark *might* also be made by the writer of the Proverbs, as to the insect fly:—has he any covert allusion to the other despicable character?

The ideal resemblances coincident in the Hebrew and Latin may be traced, perhaps, still further; for *Vitruvius* calls a *knobbed* or *bossed* nail, "*muscarius clavus*"—which we might translate, "a fly-headed nail;" and SCHINDLER refers the Hebrew *shemah*, whence (*Shemamah*, and) *Shemamith*, to the sense of *nævus*, which denotes an *excrescence*, in a body, or a *knot* in wood; or, rather, a rising bump, wheal, or blotch. But not to insist on this, we proceed to observe, that the same author in his Lexicon considers the Hebrew word *zebub*, together with its Chaldee and Arabic cognates, as including the whole of winged insects; *culex*, the gnat; *vespa*, the wasp; *æstrum*, the gad-fly; and *crabro*, the hornet: this certainly implies the inclusion of true flies, generally, whose species, it is well known, are sufficiently numerous. Moreover, that this word should hardly be restrained to a single species of fly, may be inferred from the *pun* employed in playing on the appellation of the deity *Beelzebub*, or "lord of flies," to convert it into *Beelzebul*, or "lord of the dunghill."—This I apprehend alludes to the nature of certain kinds of flies, which roll themselves and their eggs in the filth of such places; so that the change of name has a reference, a *degrading* reference to the manners of the symbol of this deity, including, no doubt, a sarcastic sneer at those of his worshippers. The *general* import of this word may be farther argued from what Pliny tells us, lib. x. cap. 18. concerning the deity *Achorem*, from the Greek *Achor*, *αχωρ*; which may be from the Hebrew *Ekron* or *Accaron*, the city where *Beelzebub*, the "lord of flies," was worshipped. "The inhabitants of Cyrene," says he, "invoke the assistance of the god *Achorem*, when the multitude of flies produces a pestilence; but when they have placated that deity by their offerings, the flies perish immediately." Whether *one* species only of fly pestered the Cyrenaicum does not appear.

On the whole, we infer, that *oreb* signifies a certain kind of fly—the *Dog-fly*; and that *zebub* signifies *flies* in general;—whether *Shemamah*, *Shemamith*, may be taken for a fly, also, must be left to the decision of the reader.

N. B. *Bellori* considered the god of *flies*, as the god of *bees* also; for which he has authority from antiquity. Vide Plate, **BEELZEBUB**, 2 Kings i. 2.



ON THE HISTORY OF THE NATION OF THE NUBIANS

By James Bruce, Esq.

As the Nubians are a people of great antiquity, and have been the seat of a powerful empire, it is not surprising that they have attracted the attention of many travellers. The first of these was Ptolemy, who in the second century of our era, wrote a history of Egypt, in which he mentions the Nubians as a powerful nation, who were at that time in possession of the country between the Nile and the Red Sea. He also mentions that they were a people of great wealth, and that they were very warlike.

After this, the Nubians were mentioned by many other writers, but none of them gave us any accurate information of their history or customs. It was not until the discovery of the Nile, by James Bruce, in the year 1768, that we began to have a more accurate knowledge of this people.

After this, the Nubians were mentioned by many other writers, but none of them gave us any accurate information of their history or customs. It was not until the discovery of the Nile, by James Bruce, in the year 1768, that we began to have a more accurate knowledge of this people. Bruce's discovery of the Nile, and his subsequent travels in Nubia, have been the source of much valuable information regarding the history and customs of the Nubians. He has shown that they were a people of great antiquity, and that they were at one time in possession of a powerful empire. He has also shown that they were a people of great wealth, and that they were very warlike.

As it was the intention of the author to give a more accurate knowledge of the Nubians, he has collected a quantity of the most authentic and interesting information that he could obtain. This information is given in the form of a history, and is divided into two parts. The first part contains a general history of the Nubians, and the second part contains a more particular history of the empire of Nubia. The author has also given a description of the Nubians, and of their customs and manners. This description is given in the form of a narrative, and is intended to give the reader a more accurate knowledge of the Nubians, and of their way of life.

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ON THE NARD, AND SPIKENARD.

CANTICLES, CHAPTER IV. VERSES 13, 14.

THE subject before us has been enveloped in obscurity, occasioned by those difficulties which attend whatever is known to us through the medium of a dead language, and imperfect information:—but as it is natural to desire a further knowledge of what interests us, this article has often been canvassed as well antiently as in later times. The plant which produces the Spikenard, has recently been the subject of enquiry by two learned men, whose sentiments we shall offer to the Reader.

AN ACCOUNT OF THE NARDUS INDICA, OR SPIKENARD:

By GILBERT BLANE, M.D. F.R.S.

After some introductory observations, the Doctor says, “ I have been led to these reflexions by an account, sent me some time ago by my brother in India, of the Spikenard, or *Nardus Indica*, a name familiar in the works of the ancient physicians, naturalists, and poets; but the identity of which has not hitherto been satisfactorily ascertained. He says, in a letter dated Lucknow, December 1786, that, “ travelling with the Nabob Visier, upon one of “ his hunting excursions towards the northern mountains, I was surprised one “ day, after crossing the river Rapti, about twenty miles from the foot of the “ hills, to perceive the air perfumed with an aromatic smell; and, upon asking “ the cause, I was told it proceeded from the roots of the grass that were “ bruised or trodden out of the ground by the feet of the elephants and horses “ of the Nabob’s retinue. The country was wild and uncultivated, and this “ was the common grass which covered the surface of it, growing in large tufts “ close to each other, very rank, and in general from three to four feet in “ length. As it was the winter season, there was none of it in flower. In- “ deed, the greatest part of it had been burnt down on the road we went, in “ order that it might be no impediment to the Nabob’s encampments.

“ I collected a quantity of the roots to be dried for use, and carefully dug “ up some of it, which I sent to be planted in my garden at Lucknow. It “ there throve exceedingly, and in the rainy season it shot up spikes about “ six feet high. Accompanying this, I send you a drawing of the plant in “ flower, and of the dried roots, in which the natural appearance is tolerably “ preserved. [Vide Nos. 1, 2, on the Plate.]

“ It is called by the natives *Terankus*, which means literally, in the Hindoo “ language, fever-restrainer, from the virtues they attribute to it in that “ disease. They infuse about a dram of it in half a pint of hot water, with “ a small quantity of black pepper. This infusion serves for one dose, and

CANTICLES, IV. 13. 14

" is repeated three times a day. It is esteemed a powerful medicine in all kinds of fevers, whether continued or intermittent.

" The whole plant has a strong aromatic odour; but both the smell and the virtues reside principally in the husky roots, which in chewing have a bitter, warm, pungent taste, accompanied with some degree of that kind of glow in the mouth which cardamoms occasion."

" Besides the drawing, a dried specimen has been sent, which was in such good preservation as to enable Sir JOSEPH BANKS, P. R. S. to ascertain it by the botanical characters to be a species of *Andropogon*.

" There is great reason, however, to think, that it is the true *Nardus Indica* of the ancients; for, first, the circumstance, in the account above recited, of its being discovered in an unfrequented country from the odour it exhaled by being trod upon by the elephants and horses, corresponds, in a striking manner, with an occurrence related by ARRIAN, in his History of the Expedition of Alexander the Great into India. It is there mentioned, lib. VI. cap. 22. that, during his march through the deserts of Gadosia, the air was perfumed by the Spikenard, which was trampled under foot by the army; and that the Phœnicians, who accompanied the expedition, collected large quantities of it, as well as of myrrh, in order to carry them to their own country, as articles of merchandise. This last circumstance seems further to ascertain it to have been the true *Nardus*; for the Phœnicians, who, even in war, appear to have retained their genius for commerce, could no doubt distinguish the proper quality of this commodity.

" Secondly, though the accounts of the ancients concerning this plant are obscure and defective, it is evident, it was a plant of the order of *gramina*; for the term *arista*, so often applied to it, was appropriated by them to the fructification of grains and grasses, and seems to be a word of Greek original to denote the most excellent portion of those plants, which are the most useful in the vegetable creation for the sustenance of animal life, and nature has also kindly made them the most abundant in all parts of the habitable earth. The term *spica* is applied to plants of the natural order *verticillatæ*, in which there are many species of fragrant plants, and the lavender, which being an indigenous one, affording a grateful perfume, was called *Nardus Italica* by the Romans; but we never find the term *arista* applied to these. The poets, as well as the naturalists, constantly apply this latter term to the true *Nardus*. STATIUS calls the Spikenard *odoratæ aristæ*. OVID, in mentioning it as one of the materials of the Phœnix's nest, calls it *Nardi levis arista*; and a poem, ascribed to LACTANTIUS, on the same subject, says, *his addit teneras Nardis pubentis aristas*, where the epithet *pubentis* seems even to point out that it belonged to the genus *andropogon*, a name given to it by LINNÆUS from this circumstance. GALEN says, that though there are various sorts of *Nardus*, the term *Νάρδος-σαχός*, or Spikenard, should not be applied to any but the *Nardus Indica*. It would appear, that the *Nardus Celtica* was a plant of

of a quite different habit, and is supposed to be a species of *Valeriana*. The description of the *Nardus Indica* by PLINY does not indeed correspond with the appearance of our specimen; for he says it is *frutex radice pingui et crassâ*; whereas ours has small fibrous roots. But as Italy is very remote from the native country of this plant, it is reasonable to suppose, that others, more easily procurable, used to be substituted for it; and the same author says, that there were nine different plants by which it could be imitated and adulterated. There would be strong temptations to do this from the great demand for it, and the expence and difficulty of distant inland carriage; and as it was much used as a perfume, being brought into Greece and Italy in the form of an unguent manufactured in Laodicea, Tarsus, and other towns of Syria and Asia Minor, it is probable, that any grateful aromatic resembling it was allowed to pass for it. It is probable, that the *Nardus* of PLINY, and great part of what is now imported from the Levant, and found under that name in the shops, is a plant growing in the countries on the Euphrates, or in Syria, where the great emporiums of the eastern and western commerce were situated. There is a *Nardus Assyria* mentioned by HORACE; and DIOSCORIDES mentions the *Nardus Syriaca*, as a species different from the *Indica*, which certainly was brought from some of the remote parts of India; for both DIOSCORIDES and GALEN, by way of fixing more precisely the country from whence it comes, call it also *Nardus Gangites*.

“With regard to the virtues of this plant, it was highly valued anciently as an article of luxury as well as a medicine. The favourite perfume which was used at the ancient baths and feasts was the *unguentum nardinum*; and it appears, from a passage in HORACE, that it was so valuable, that as much of it as could be contained in a small box of precious stone was considered as a sort of equivalent for a large vessel of wine, and a handsome quota for a guest to contribute at an entertainment, according to the custom of antiquity:

———*Nardo vinum merebere*
Nardi parvus onyx eliciet cadum.

“The fragrance and aromatic warmth of the *Nardus* depends on a fixed principle like that of cardamoms, ginger, and some other spices. I tried to extract the virtues of the *Nardus* by boiling water, by maceration in wine and in proof spirits, but it yielded them sparingly and with difficulty to all these *menstrua*.” So far Dr. BLANE. *Phil. Trans.* Vol. LXXX. p. 284.

Much about the time when this was published in England, the attention of Sir WILLIAM JONES, in India, was occupied on this very article: his enquiries led him to a totally different plant. The following is his account:

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useful. This is intended as an apology for the pains, which have been taken to procure a determinate answer to a question of no apparent utility, but which ought to be readily answered in *India*, "What is *Indian Spike-nard*?" All agree, that it is an odoriferous plant, the best sort of which, according to *PTOLEMY*, grew about *Rangamritica* or *Rangamati*, and on the borders of the country now called *Bután*: it is mentioned by *DIOSCORIDES*, whose work I have not in my possession; but his description of it must be very imperfect, since neither *LINNÆUS* nor his disciples pretend to class it.

"In order to procure information from the learned natives, it was necessary to know the name of the plant in some *Asiatic* language. The very word *nard* occurs in the song of *SOLOMON*; but the name and the thing were both exotick: the *Hebrew* lexicographers imagine both to be *Indian*; but the word is in truth *Persian*.

"The *Arabs* have borrowed the word *nard*, but in the sense, as we learn from the *Kámûs*, of a compound medicinal unguent. Whatever it signified in old *Persian*, the *Arabic* word *sumbul*, which, like *sumbalah*, means an ear or spike, has long been substituted for it; and there can be no doubt, that by the *sumbul* of *India* the *Muselmáns* understand the same plant with the *nard* of *PTOLEMY* and the *Nardostachys*, or *Spikenard*, of *GALEN*.

"A *Muselman* physician from *Delhi* assured me positively, that the plant was not *Jatámansi*, but *Sád*, as it is named in *Arabic*, which the author of the *Tohfatu'l Múmenín* particularly distinguishes from the *Indian Sumbul*. He produced on the next day an extract from the Dictionary of Natural History, to which he had referred; and I present you with a translation of all that is material in it. "1. *SUD* has a roundish olive-shaped root, externally black, but white internally, and so fragrant as to have obtained in *Persia* the name of *Subterranean Musk*: its leaf has some resemblance to that of a leek, but is longer and narrower, strong, somewhat rough at the edges, and tapering to a point. 2. *SUMBUL* means a spike or ear, and was called *nard* by the *Greeks*. There are three sorts of *Sumbul* or *Nardín*; but, when the word stands alone, it means the *Sumbul* of *India*, which is a herb without flower or fruit, (he speaks of the drug only) like the tail of an ermine, or of a small weasel, but not quite so thick, and about the length of a finger. It is darkish, inclining to yellow, and very fragrant: it is brought from *Hindustán*, and its medicinal virtue lasts three years." It was easy to procure the dry *Jatamansi*, which corresponded perfectly with the description of the *Sumbul*; and, though a native *Muselman* afterwards gave me a *Persian* paper, written by himself, in which he represents the *Sumbul* of *India*, the *Sweet Sumbul*, and the *Jatamansi* as three different plants, yet the authority of the *Tohfatu'l Múmenín* is decisive, that the *sweet Sumbul* is only another denomination of *nard*, and the physician, who produced that authority, brought, as a specimen of *sumbul*, the very same drug, which my *Pandit*, who is also a physician, brought as a specimen

cimen of the *Jatamansi*: a *Brahman* of eminent learning gave me a parcel of the same sort, and told me that it was used in their sacrifices; that, when fresh, it was exquisitely sweet, and added much to the scent of rich essences, in which it was a principal ingredient; that the merchants brought it from the mountainous country to the north-east of *Bengal*; that it was the entire plant, not a part of it, and received its *Sanscrit* names from its resemblance to *locks of hair*; as it is called *Spikenard*, I suppose from its resemblance to a spike, when it is dried, and not from the configuration of its flowers, which the *Greeks*, probably, never examined. The *Persian* author describes the whole plant as resembling the tail of an ermine; and the *Jatamansi*, which is manifestly the *Spikenard* of our druggists, has precisely that form, consisting of withered stalks and ribs of leaves, cohering in a bundle of yellowish brown capillary fibres, and constituting a spike about the size of a small finger. We may on the whole be assured, that the *nardus* of *PTOLEMY*, the *Indian Sumbul* of the *Persians* and *Arabs*, the *Jatamansi* of the *Hindus*, and the *Spikenard* of our shops, are one and the same plant; but to what class and genus it belongs in the *Linnean* system, can only be ascertained by an inspection of the fresh blossoms. Dr. PATRICK RUSSELL, who always communicates with obliging facility his extensive and accurate knowledge, informed me by letter, that “*Spikenard* is carried over the desert (from *India*, I presume) to *Aleppo*, “where it is used in substance, mixed with other perfumes, and worn in small “bags, or in the form of essence; and kept in little boxes or phials, like *âtar* “of roses.” He is persuaded, and so am I, that the *Indian nard* of the ancients, and that of our shops, is the same vegetable.

“I am not, indeed, of opinion, that the *nardum* of the *Romans* was merely the essential oil of the plant, from which it was denominated, but am strongly inclined to believe, that it was a *generick* word, meaning what we now call *âtar*, either the *âtar* of roses from *Cashmir* and *Persia*, that of *Cetaca* or *Pandanus*, from the western coast of *India*, or that of *Aguru*, or aloe-wood, from *Asam* or *Cochinchina*, the process of obtaining which is described by *ABULFAZL*, or the mixed perfume called *âbir*, of which the principal ingredients were yellow sandal, violets, orange-flowers, wood of aloes, rose-water, musk, and true spikenard: all those essences and compositions were costly; and most of them being sold by the *Indians* to the *Persians* and *Arabs*, from whom, in the time of *OCTAVIUS*, they were received by the *Syrians* and *Romans*, they must have been extremely dear at Jerusalem and at Rome. There might also have been a pure *nardine oil*, as *ATHENÆUS* calls it; but *nardum* probably meant (and *KOENIG* was of the same opinion) an *Indian* essence in general, taking its name from that ingredient, which had, or was commonly thought to have, the most exquisite scent.”

When the *Philosophical Transactions*, containing the Essay of Dr. BLANE, reached India, Sir WM. JONES supported his opinion by additional arguments; but their application is not much to our present purpose. He says,
“My

“ My own enquiries have convinced me, that, the *Indian Spikenard*, of *Dioscorides* is the *Sumbulu'l Hind*, and that the *Sumbulu'l Hind* is the *Jatamansi* of *Amarsinh*. I am persuaded, that the true *Nard* is a species of *Valerian*, produced in the most remote and hilly parts of *India*, such as *Népál*, *Morang*, and *Butan*, near which *Ptolemy* fixes its native soil: the commercial agents of the *Dévaraja* call it also *Pampi*, and by their account the dried specimens, which look like the tails of ermines, rise from the ground, resembling ears of green wheat both in form and color; a fact, which perfectly accounts for the names *Stachys*, *Spica*, *Sumbul*, and *Khúsh*, which *Greeks*, *Romans*, *Arabs*, and *Persians* have given to the drug, though it is not properly a spike, and not merely a root, but the whole plant, which the natives gather for sale, before the radical leaves, of which the fibres only remain after a few months, have unfolded themselves from the base of the stem. It is used, say the *Butan* agents, as a perfume and in medicinal unguents, but with other fragrant substances, the scent and power of which it is thought to increase: as a medicine, they add, it is principally esteemed for complaints in the bowels.”

Botanical Observations on the Spikenard of the Ancients: intended as a Supplement to the late Sir Wm. Jones's Papers. By Wm. Roxburgh, M. D.

VALERIANA JATAMANSI.

Generic Character.—Flowers triandrous, leaves entire, four-fold, the inner radical pair petioled, and cordate; the rest smaller, sessile, and sub-lanceolate; seeds crowned with a pappus.

The plants now received, are growing in two small baskets of earth; in each basket there appears above the earth between thirty and forty hairy spike-like bodies, but more justly compared to the tails of *Ermines*, or small *Weasels*; from the apex of each, or at least of the greater part of them, there is a smooth lanceolate, or lanceolate-oblong, three or five-nerved, short-petioled, acute or obtuse, slightly serrulate leaf or two shooting forth. [The term *spica*, or spike, is not so ill applied to this substance as may be imagined; several of the *Indian* grasses, well known to me, have spikes almost exactly resembling a single strait piece of *nardus*: and when those hairs (or flexible *arista-like* bristles) are removed, *Pliny's* words, *frutex radice pingui et crassa*,” are by no means inapplicable. See Nos. 3, 4, 5, 6, 7.] No. 6. represents one of them in the above state; and on gently removing the fibres or hairs which surround the short petiols of these leaves, I find it consists of numerous sheaths, of which one, two, or three of the upper or interior ones are entire, and have their fibres connected by a light-brown coloured membranous substance, as at *b*; but in the lower exterior sheaths, where this connecting membrane is decayed, the more durable hair-like fibres remain distinct, giving to the whole the appearance of an *Ermine's* tail: this part, as well as the root, are evidently perennial. The root itself (beginning at the surface of the earth where the fibrous envelope ends) is from three to twelve inches long, covered with a pretty thick light-brown

brown coloured bark; from the main root, which is sometimes divided, there issues several smaller fibres. No. 5, is another plant with a long root; here the hair-like sheaths, beginning at *a*, are separated from this, the perennial part of the stem, and turned to the right side; at the apex is seen the young shoot, marked *b*, which is not so far advanced as at No. 6; *ccc* show the remains of last year's annual stem. When the young shoot is a little further advanced than in No. 5, and not so far as in No. 6, they resemble the young convolute shoots of monocotyledonous plants.

June 1795. The whole of the above plants have perished, without producing flowers, notwithstanding every care that could possibly be taken of them. The principal figure in the drawing, marked No. 4, and the following description, as well as the above definition, are therefore chiefly extracted from the engraving and description in the second volume of the *Researches*, and from the information communicated to me by Mr. *Burt*, the gentleman who had charge of the plants that flowered at *Gaya*, and who gave Sir *Wm. Jones* the drawing and description thereof. [Which we have copied from the *Calcutta Edition*. Vide No. 3. Plate]

Description of the Plant.

Root, it is already described above.

Stem, lower part perennial, involved in fibrous sheaths, &c. as above described; the upper part herbaceous suberect, simple, from six to twelve inches long.

Leaves four-fold, the lowermost pair of the four radical are opposite, sessile, oblong, forming, as it were, a two-valved spathe; the other pair are also opposite, petioled, cordate, margins waved and pointed; those of the stem sessile and lanceolate; all are smooth on both sides.

Corymb terminal, first division trichotomous.

Bracts awled.

Calyx scarce any.

Corol one petaled, funnel-shaped, tube somewhat gibbous. Border five-cleft.

Stamens, filaments three, project above the tube of the corol; anthers incumbent.

Pistil, germ beneath. Style erect, length of the tube. Stigma simple.

Pericarp, a single seed crowned with a pappus."

.....

The result of these observations is: that there grew in Arabia and Syria a fragrant grass, which was considered as a *Nard*, and was probably known under that name. 2. That the true *Indian Nard*, or *Spikenard*, was a plant of a different kind, and not native of Syria. 3. That the *atar*, or essential fragrance of this plant, is called absolutely *nard*, or *spikenard*; and probably was known antiently under the same appellation.

I apprehend that these three particulars occur in Scripture; and that they deserve our attention. This word *nard* is repeated somewhat awkwardly, Cant. iv. 13, 14. "Camphire with *spikenard*: *spikenard* with saffron." Why should this plant be *twice* named? It will appear that this peculiarity struck us formerly, (vide "on SOLOMON'S SONG." FRAGMENTS,) and not without reason: but if we may suppose that the first *nard* means the Syrian or Arabian plant, (or the whole genus of scented grasses, "three sorts of *Nardin*") which

no doubt was well known to Solomon, whereas the second *nard* means the Indian *nard*, or true *spikenard*, then it is very probable that the words are clear, and that the latter word merely wants some discriminating epithet, answering to *spike*, which transcribers not understanding have dropped; or, that a different mode of pronunciation distinguished the names of these two plants when mentioned in discourse: [they are also differently *pointed* in the printed copies] and I think it worth observing, that the first word is *NARDIM* (*plural*). “*Copherim* (*Henna-plants*, plural) with *Nardim*,—*nards*.” But the following seems to be put absolutely, “*Nard* or *THE nard* (*singular*) with the *Crocus*.” This distinction, if admitted, and it certainly was admitted by the ancients, (and in the Arabic Dictionary of Natural History), as we have seen above, removes all difficulty, and justifies the passage.

The third acceptation of the term *nard*, or *spikenard*, occurs in the gospels. Mark, xiv. 3, mentions “*ointment* of *spikenard*, *very precious*,” which ver. 5, is said to have been worth *more* than three hundred pence (*denarii*); and John, xii, 3, mentions “*a pound* of *ointment* of *spikenard*, *VERY COSTLY*—the house was filled with the odour of the ointment—it was worth three hundred pence” (*denarii*). As this evangelist has determined the quantity—a *pound*—and the *lowest* value (for Mark says *more*) was *eight pounds fifteen shillings*, I think we may safely suppose that this was not a Syrian production, or an ointment made from any fragrant grass growing in the neighbouring districts; but was a true *atar* of Indian *spikenard*; an unguent containing the very essence of the plant, and brought at a great expence from a remote country.

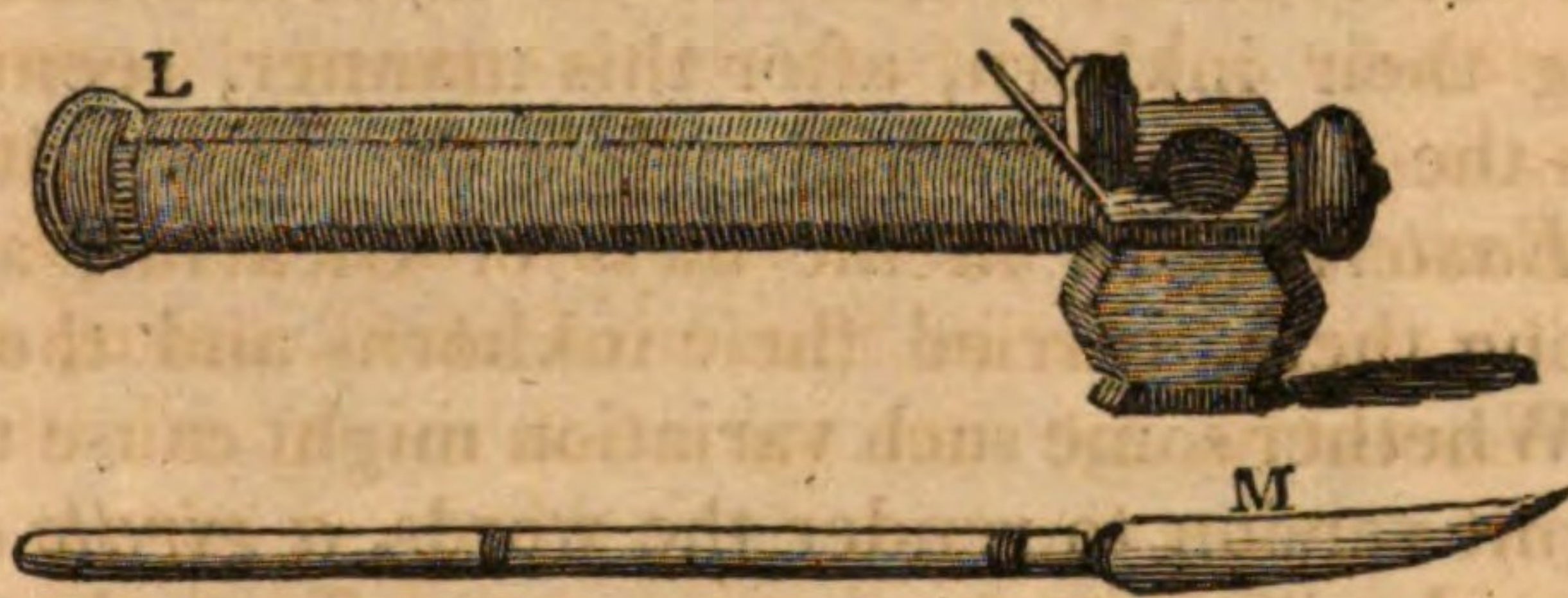
I would query also whether there might not be in the answer of our LORD, some allusion to the remoteness of the country from whence this unguent was brought: “wheresoever this gospel shall be preached throughout the *WHOLE WORLD* (*Χοσμον*)—shall be her memorial.” q. d. “This unguent came from a distant country, to be sure, but the gospel shall spread to a much greater distance, yea, all over the world; so that in India itself, from whence this unguent came, shall the memorial of its application to my sacred person, be mentioned with honour.” The idea of a far country, connected with the ointment, seems to have suggested that of “the whole world.”

The above instance, I think clear: perhaps, we may now revert with advantage to the Canticles, were we find the Bride saying, “My *spikenard* sendeth forth the smell thereof.” From the word *nard* being singular here, literally “my *nard* giveth his scent,” shall we say this was in the form of an “essence, in a small bag?” or, was it a number of sprigs of the fragrant grass, worn like a nosegay in the bosom of this fair lady? It is certain that the “savour of her good ointments” is mentioned, verse 3, as highly attractive: and that an *atar* of *spikenard* used for perfume, might be intended, needs no proof: but, if so, then we have this perfume in its artificial state alluded to, both in the Old and the New Testaments; and the passages which mention it, mutually illustrate each other.

INKHORN.

EZEKIEL IX. 2.

AND BEHOLD, SIX MEN CAME FROM THE WAY OF THE HIGHER GATE, WHICH LIETH TOWARD THE NORTH: AND EVERY MAN A SLAUGHTER WEAPON IN HIS HAND; AND ONE MAN AMONG THEM WAS CLOTHED WITH LINEN,—WITH A WRITER'S INKHORN BY HIS SIDE.



THIS figure is from Dr. Pococke, who describes it, as “an INKHORN, which the writers and tradesmen stick into their girdle; and it is very convenient, the top shutting down; at the end it opens; and pens, and a PENKNIFE, are put into it.”

The reader will recollect that the pens are usually of reed, *calamus scriptorius*: and that the characters of eastern writing are usually strong and black.

The following are Mr. HARMER's observations on this passage of the prophet:

“The modern inhabitants of Egypt appear to make use of *ink* in their sealing, as well as the Arabs of the desert, who may be supposed not to have such conveniences as those that live in such a place as Egypt: for Dr. Pococke saith, that “they make the impression of their name with their seal, generally of cornelian, which they wear on their finger, and which is blacked when they have occasion to seal with it.”

“This may serve to shew us, that there is a closer connection between the vision of St. John, Rev. vii. 2, and that of Ezekiel, chap. ix. 2, than commentators appear to have apprehended. They must be joined, I imagine, to have a complete view of either. St. John saw an angel with the *seal* of the living God, and therewith multitudes were sealed in their *foreheads*; but to understand *what sort of mark* was made there, you must have recourse to the *inkhorn* of Ezekiel. On the other hand, Ezekiel saw a person equipped with an *inkhorn*, who was to mark the servants of God on their foreheads, with *ink* that is, but how the ink was to be *applied* is not expressed; nor was there any need that it should, if in those times ink was applied with a seal: a seal being in the one case plainly supposed; as in the Apocalypse, the mention of a seal made it needless to take any notice of an inkhorn by his side.

EZEKIEL ix. 2.

“This

“ This *position* of the inkhorn of Ezekiel’s writer may appear somewhat odd to an European reader, but the custom, of placing it by the side continues in the East to this day. Olearius, who takes notice, *Voy. en Moscovie, &c.* p. 857, of a way that they have of thickening their ink with a sort of paste they make, or with sticks of Indian ink, which is the best paste of all, a circumstance favourable to their sealing with ink, observes, p. 817.—[Dr. Shaw also speaks of their writers suspending their inkhorns by their side. I should not therefore have taken any notice of this circumstance, had not the account of Olearius led us to something farther.]—that the Persians carry about with them, by means of their girdles, a dagger, a knife, a handkerchief, and their money: and those that follow the profession of writing out books, their *inkhorn*, their penknife, their whetstone to sharpen it, their letters, and every thing the Moscovites were wont *in his time* to put in their *boots*, which served them instead of pockets. The Persians, in carrying their inkhorn, after this manner, seem to have retained a custom as ancient as the days of Ezekiel; while the Moscovites, whose garb was very much in the *Eastern taste* in the days of Olearius, and who had many *oriental* customs among them, carried their inkhorns and their papers in a very different manner. Whether some such variation might cause the Egyptian translators of the Septuagint version to render the words, *a girdle of sapphire*, or *embroidery, on the loins*, I will not take upon me to affirm; but I do not imagine our Dr. Castell would have adopted this sentiment in his Lexicon, (see Lowth upon the place) had he been aware of this eastern custom: for with great propriety is the word *Keseth* mentioned in this chapter three times, if it signified an inkhorn, the requisite instrument for sealing those devout mourners; but no account can be given why this *Keseth* should be mentioned so often, if it only signified an embroidered girdle.” *Harmer’s Obs.* Vol. II. p. 459.

It should be recollected also, that in the East, the artisans carry most of the implements of their professions in their girdles; the soldier carries his sword; the butcher his knife; and the carpenter carries even his hammer, and his saw.

EXPLANATION OF THE FIGURES.

L is the INKHORN; its cover lifted up: it seems to resemble those among ourselves, which are made of leather; and which I think are known by the name of “Edinburgh inkhorns.”

M. The knife usually carried in the handle of the inkhorn: but in this instance, I presume it is too long for that purpose: as I do not perceive that it is capable of being divided, of being clasped, or otherwise shortened.



TOWERS, OR KIOSKS.

CANT. Chap. viii. Verse 10.

I AM A WALL, AND MY BREASTS LIKE TOWERS:

THEN WAS I IN HIS EYES AS ONE THAT FOUND FAVOUR.

THE character of the female sex has led them to a certain display of their bosoms; and we have seen in our own days, a mode of dress adopted, which did not tend to diminish the amplitude in point of appearance of this part of female beauty. Nevertheless, the women in the East are much more desirous than those of northern climates, of a full and swelling breast: in fact, they study the *plumpness*, the *enbonpoint* of appearance, to a degree uncommon among ourselves; and what in the temperate regions of Europe might be called an elegant slenderness of shape, they would consider as a *meagre* appearance of starvation. They indulge these notions to excess. It is necessary to premise this, before we can enter thoroughly into the spirit of the language before us: which we take the liberty to render somewhat differently from our public translation.

BRIDE. Our sister is little, and she hath no breasts: *being as yet too young; immature:*

What shall we do for our sister, in the day when she shall be spoken for?

BRIDEGROOM. If she be a wall, we will build on her [*ranges*] turrets of silver:

If she be a door-way, we will frame around her pannels of cedar.

BRIDE I am a wall and my breasts like *kiosks*,

Thereby I appeared in his eyes as one who offered peace [*repose: enjoyment.*]

CANTICLES, Chap. viii.

The

The ideas couched in these verses appear to be these, "*Our sister is quite young,*" says the bride;—*but*, says the bridegroom, "she is upright as a wall; and if her breast do not project beyond her person, as kiosks project beyond a wall, we will ornament her dress, [*q.* head-dress?] in the most magnificent manner with turret-shaped diadems of silver." This leads us to the reflection of the bride, understood to be speaking to herself, *aside*, "As my sister is compared to a wall, I also in my person am upright as a wall: and I have this further advantage, that my bosom is ample and full, as a kiosk projecting over a wall: and though kiosks offer repose and indulgence, yet my bosom offers to my spouse more effectual enjoyment than they do." This, it may be conjectured, is the simple idea of the passage; the difference being, that *turrets* are built on the top of a wall; *kiosks* project from the front of it. The name *kiosk* is not restricted to this construction; but includes most of what we call summer-houses, or pavilions.

There is another passage which our print illustrates, 2 *Kings* ix. 30:—"Jezabel painted her face, attired her head, and looked out at a window As Jehu entered the gate—he lifted up his face to the window and said, "Throw her down," &c. If we suppose the window out of which Jezabel looked was one of those in the kiosk of our Print, we see how it might be over the gateway at which Jehu was entering; how he might lift up his face toward the window which he was about to enter; how her blood might be sprinkled on the wall, and on the horses of Jehu's chariot, when she was thrown down; and how he might trample her under foot, *i. e.* of his horses; verse 33. In short, the whole of the story becomes more circumstantial, by connecting this idea of the *kiosk* with it, as the station of the idolatrous queen of Israel on that occasion.

That a kiosk—a projecting kiosk, was a common situation from whence to behold a triumphant entry is implied in the song of Deborah, who represents the mother of Sisera as looking out of a window, and crying through the lattice, "Why is his chariot so long in coming?" Our Print shews these parts distinctly; the window, and the lattice; it shews too, how by its projection from the wall, a structure of this kind commanded the view of a whole street; so that no situation could be more suitable for enjoying the sight of a procession; also, as apparently the being in the *kiosk* implies a place of pleasure, *gala* expectations, it renders the understood reverse of defeat instead of triumph, more bitter, more poignant.

"At the upper end of the room there is sometimes a light wooden kiosk projecting from the body of a building, and supported in the manner of a balcony. It is raised a foot and a half higher than the floor of the Divan, of which it forms a continuation, and is decorated in the same fashion. It is nearly of the same breadth with the room, but the ceiling is lower, and having windows on the three sides it is more airy." RUSSELL'S ALEPPO, p. 28. "Some of the Marubba [first floor chambers of the women] have handsome kiosks projecting over the shrubbery." p. 32.

This is something like the bow, or bay, window, of our ancient houses.



EASTERN DRESSES. Plate I.

- [illegible]



PLATE I. THE DANCE.

OF FEMALE DRESS, IN THE EAST.

ISAIAH, CHAP. III. VERSE 18.

ARTICLES of dress, especially of Female dress, are so capricious, that having been used they are laid aside, and being laid aside they are forgotten: we know this to be fact in respect to the fashions of our own country, and much is the most learned British antiquary puzzled to appropriate to their uses the kinds of apparel, and their parts, which occur in the descriptions of our ancient writers. If this be the case in our own country, there can be no wonder, that we should be more than equally embarrassed when endeavouring to explain and elucidate passages of the Sacred Writings where articles of dress are mentioned.

As we differ considerably from all commentators who have endeavoured to determine the various parts of dress worn by a Hebrew lady, as mentioned by the prophet in the passage under consideration, we beg leave to offer our reasons for such differences. The following is the rendering of our public version; and underneath it, in italics, is that of Bishop Lowth.

In that day, the LORD will take away the bravery of
.....from them the ornaments of

- | | |
|---------------|--|
| עכסים | 1. Their tinkling ornaments about their feet. |
| Ocasim | <i>The Feet Rings.</i> |
| שביסים | 2. And their eauls, [or net works. <i>Margin.</i>] |
| Shebisim | <i>The Net-works.</i> |
| שהרנים | 3. And their round tires like the moon. |
| Sheharenim | <i>The Crescents.</i> |
| נטפות | 4. The chains, [or sweet balls. <i>Margin.</i>] |
| Nethephut | <i>The Pendants.</i> |
| שרות | 5. And the bracelets. |
| Sharut | <i>Bracelets.</i> |
| רעלות | 6. The mufflers. |
| Rolut | <i>The thin Veils.</i> |
| פארים | 7. The bonnets. |
| Parim | <i>The Tires.</i> |
| צעדות | 8. The Ornaments of the legs. |
| Tjodut | <i>The Fetters.</i> |
| קשרים | 9. And the head-bands. |
| Kesharim | <i>The Zones.</i> |
| בתי הנפש | 10. And the tablets, [houses of the soul. <i>Margin.</i>] |
| Beti henepesh | <i>The Perfume Boxes.</i> |
| לחשים | 11. The ear-rings. |
| Lechashim | <i>The Amulets.</i> |

12. The

ISAIAH, CHAP. III. VERSE 18.

SPRENGEL



ON THE NARD, AND SPIKENARD.

CANTICLES, CHAPTER IV. VERSES 13, 14.

THE subject before us has been enveloped in obscurity, occasioned by those difficulties which attend whatever is known to us through the medium of a dead language, and imperfect information:—but as it is natural to desire a further knowledge of what interests us, this article has often been canvassed as well antiently as in later times. The plant which produces the Spikenard, has recently been the subject of enquiry by two learned men, whose sentiments we shall offer to the Reader.

AN ACCOUNT OF THE NARDUS INDICA, OR SPIKENARD:

By GILBERT BLANE, M.D. F.R.S.

After some introductory observations, the Doctor says, “I have been led to these reflexions by an account, sent me some time ago by my brother in India, of the Spikenard, or *Nardus Indica*, a name familiar in the works of the ancient physicians, naturalists, and poets; but the identity of which has not hitherto been satisfactorily ascertained. He says, in a letter dated Lucknow, December 1786, that, “travelling with the Nabob Visier, upon one of his hunting excursions towards the northern mountains, I was surprised one day, after crossing the river Rapti, about twenty miles from the foot of the hills, to perceive the air perfumed with an aromatic smell; and, upon asking the cause, I was told it proceeded from the roots of the grass that were bruised or trodden out of the ground by the feet of the elephants and horses of the Nabob’s retinue. The country was wild and uncultivated, and this was the common grass which covered the surface of it, growing in large tufts close to each other, very rank, and in general from three to four feet in length. As it was the winter season, there was none of it in flower. Indeed, the greatest part of it had been burnt down on the road we went, in order that it might be no impediment to the Nabob’s encampments.

“I collected a quantity of the roots to be dried for use, and carefully dug up some of it, which I sent to be planted in my garden at Lucknow. It there throve exceedingly, and in the rainy season it shot up spikes about six feet high. Accompanying this, I send you a drawing of the plant in flower, and of the dried roots, in which the natural appearance is tolerably preserved. [Vide Nos. 1, 2, on the Plate.]

“It is called by the natives *Terankus*, which means literally, in the Hindoo language, fever-restrainer, from the virtues they attribute to it in that disease. They infuse about a dram of it in half a pint of hot water, with a small quantity of black pepper. This infusion serves for one dose, and

“ is repeated three times a day. It is esteemed a powerful medicine in all kinds of fevers, whether continued or intermittent.

“ The whole plant has a strong aromatic odour; but both the smell and the virtues reside principally in the husky roots, which in chewing have a bitter, warm, pungent taste, accompanied with some degree of that kind of glow in the mouth which cardamoms occasion.”

“ Besides the drawing, a dried specimen has been sent, which was in such good preservation as to enable Sir JOSEPH BANKS, P. R. S. to ascertain it by the botanical characters to be a species of *Andropogon*.

“ There is great reason, however, to think, that it is the true *Nardus Indica* of the ancients; for, first, the circumstance, in the account above recited, of its being discovered in an unfrequented country from the odour it exhaled by being trod upon by the elephants and horses, corresponds, in a striking manner, with an occurrence related by ARRIAN, in his History of the Expedition of Alexander the Great into India. It is there mentioned, lib. VI. cap. 22. that, during his march through the deserts of Gadrosia, the air was perfumed by the Spikenard, which was trampled under foot by the army; and that the Phœnicians, who accompanied the expedition, collected large quantities of it, as well as of myrrh, in order to carry them to their own country, as articles of merchandise. This last circumstance seems further to ascertain it to have been the true *Nardus*; for the Phœnicians, who, even in war, appear to have retained their genius for commerce, could no doubt distinguish the proper quality of this commodity.

“ Secondly, though the accounts of the ancients concerning this plant are obscure and defective, it is evident, it was a plant of the order of *gramina*; for the term *arista*, so often applied to it, was appropriated by them to the fructification of grains and grasses, and seems to be a word of Greek original to denote the most excellent portion of those plants, which are the most useful in the vegetable creation for the sustenance of animal life, and nature has also kindly made them the most abundant in all parts of the habitable earth. The term *spica* is applied to plants of the natural order *verticillatæ*, in which there are many species of fragrant plants, and the lavender, which being an indigenous one, affording a grateful perfume, was called *Nardus Italica* by the Romans; but we never find the term *arista* applied to these. The poets, as well as the naturalists, constantly apply this latter term to the true *Nardus*. STATIUS calls the Spikenard *odoratæ aristæ*. OVID, in mentioning it as one of the materials of the Phœnix's nest, calls it *Nardi levis arista*; and a poem, ascribed to LACTANTIUS, on the same subject, says, *his addit teneras Nardi pubentis aristas*, where the epithet *pubentis* seems even to point out that it belonged to the genus *andropogon*, a name given to it by LINNÆUS from this circumstance. GALEN says, that though there are various sorts of *Nardus*, the term *Νάρδος-σαχς*, or Spikenard, should not be applied to any but the *Nardus Indica*. It would appear, that the *Nardus Celtica* was a plant of

of a quite different habit, and is supposed to be a species of *Valeriana*. The description of the *Nardus Indica* by PLINY does not indeed correspond with the appearance of our specimen; for he says it is *frutex radice pingui et crassâ*; whereas ours has small fibrous roots. But as Italy is very remote from the native country of this plant, it is reasonable to suppose, that others, more easily procurable, used to be substituted for it; and the same author says, that there were nine different plants by which it could be imitated and adulterated. There would be strong temptations to do this from the great demand for it, and the expence and difficulty of distant inland carriage; and as it was much used as a perfume, being brought into Greece and Italy in the form of an unguent manufactured in Laodicea, Tarsus, and other towns of Syria and Asia Minor, it is probable, that any grateful aromatic resembling it was allowed to pass for it. It is probable, that the *Nardus* of PLINY, and great part of what is now imported from the Levant, and found under that name in the shops, is a plant growing in the countries on the Euphrates, or in Syria, where the great emporiums of the eastern and western commerce were situated. There is a *Nardus Assyria* mentioned by HORACE; and DIOSCORIDES mentions the *Nardus Syriaca*, as a species different from the *Indica*, which certainly was brought from some of the remote parts of India; for both DIOSCORIDES and GALEN, by way of fixing more precisely the country from whence it comes, call it also *Nardus Gangites*.

“With regard to the virtues of this plant, it was highly valued anciently as an article of luxury as well as a medicine. The favourite perfume which was used at the ancient baths and feasts was the *unguentum nardinum*; and it appears, from a passage in HORACE, that it was so valuable, that as much of it as could be contained in a small box of precious stone was considered as a sort of equivalent for a large vessel of wine, and a handsome quota for a guest to contribute at an entertainment, according to the custom of antiquity:

———*Nardo vinum merebere*
Nardi parvus onyx eliciet cadum.

“The fragrance and aromatic warmth of the *Nardus* depends on a fixed principle like that of cardamoms, ginger, and some other spices. I tried to extract the virtues of the *Nardus* by boiling water, by maceration in wine and in proof spirits, but it yielded them sparingly and with difficulty to all these *menstrua*.” So far Dr. BLANE. *Phil. Trans.* Vol. LXXX. p. 284.

Much about the time when this was published in England, the attention of Sir WILLIAM JONES, in India, was occupied on this very article: his enquiries led him to a totally different plant. The following is his account:

“Ignorance is to the mind what extreme darkness is to the nerves: both cause an uneasy sensation; and we naturally love knowledge, as we love light, even when we have no design of applying either to a purpose essentially useful.

useful. This is intended as an apology for the pains, which have been taken to procure a determinate answer to a question of no apparent utility, but which ought to be readily answered in *India*, "What is *Indian Spike-nard*?" All agree, that it is an odoriferous plant, the best sort of which, according to *PTOLEMY*, grew about *Rangamritica* or *Rangamati*, and on the borders of the country now called *Bután*: it is mentioned by *DIOSCORIDES*, whose work I have not in my possession; but his description of it must be very imperfect, since neither *LINNÆUS* nor his disciples pretend to class it.

"In order to procure information from the learned natives, it was necessary to know the name of the plant in some *Asiatic* language. The very word *nard* occurs in the song of *SOLOMON*; but the name and the thing were both exotick: the *Hebrew* lexicographers imagine both to be *Indian*; but the word is in truth *Persian*.

"The *Arabs* have borrowed the word *nard*, but in the sense, as we learn from the *Kámûs*, of a compound medicinal unguent. Whatever it signified in old *Persian*, the *Arabic* word *sumbul*, which, like *sumbalah*, means an ear or spike, has long been substituted for it; and there can be no doubt, that by the *sumbul* of *India* the *Muselmáns* understand the same plant with the *nard* of *PTOLEMY* and the *Nardostachys*, or *Spikenard*, of *GALEN*.

"A *Muselman* physician from *Delhi* assured me positively, that the plant was not *Jatámansi*, but *Sád*, as it is named in *Arabic*, which the author of the *Tohfatu'l Múmenín* particularly distinguishes from the *Indian Sumbul*. He produced on the next day an extract from the Dictionary of Natural History, to which he had referred; and I present you with a translation of all that is material in it. "1. *SUD* has a roundish olive-shaped root, externally black, but white internally, and so fragrant as to have obtained in *Persia* the name of *Subterranean Musk*: its leaf has some resemblance to that of a leek, but is longer and narrower, strong, somewhat rough at the edges, and tapering to a point. 2. *SUMBUL* means a spike or ear, and was called *nard* by the *Greeks*. There are three sorts of *Sumbul* or *Nardín*; but, when the word stands alone, it means the *Sumbul* of *India*, which is a herb without flower or fruit, (he speaks of the drug only) like the tail of an ermine, or of a small weasel, but not quite so thick, and about the length of a finger. It is darkish, inclining to yellow, and very fragrant: it is brought from *Hindustán*, and its medicinal virtue lasts three years." It was easy to procure the dry *Jatamansi*, which corresponded perfectly with the description of the *Sumbul*; and, though a native *Muselman* afterwards gave me a *Persian* paper, written by himself, in which he represents the *Sumbul* of *India*, the *Sweet Sumbul*, and the *Jatamansi* as three different plants, yet the authority of the *Tohfatu'l Múmenín* is decisive, that the *sweet Sumbul* is only another denomination of *nard*, and the physician, who produced that authority, brought, as a specimen of *sumbul*, the very same drug, which my *Pandit*, who is also a physician, brought as a specimen

cimen of the *Jatamansi*: a *Brahman* of eminent learning gave me a parcel of the same sort, and told me that it was used in their sacrifices; that, when fresh, it was exquisitely sweet, and added much to the scent of rich essences, in which it was a principal ingredient; that the merchants brought it from the mountainous country to the north-east of *Bengal*; that it was the entire plant, not a part of it, and received its *Sanscrit* names from its resemblance to *locks of hair*; as it is called *Spikenard*, I suppose from its resemblance to a spike, when it is dried, and not from the configuration of its flowers, which the *Greeks*, probably, never examined. The *Persian* author describes the whole plant as resembling the tail of an ermine; and the *Jatamansi*, which is manifestly the *Spikenard* of our druggists, has precisely that form, consisting of withered stalks and ribs of leaves, cohering in a bundle of yellowish brown capillary fibres, and constituting a spike about the size of a small finger. We may on the whole be assured, that the *nardus* of *PTOLEMY*, the *Indian Sumbul* of the *Persians* and *Arabs*, the *Jatamansi* of the *Hindus*, and the *Spikenard* of our shops, are one and the same plant; but to what class and genus it belongs in the *Linnean* system, can only be ascertained by an inspection of the fresh blossoms. Dr. PATRICK RUSSELL, who always communicates with obliging facility his extensive and accurate knowledge, informed me by letter, that “*Spikenard* is carried over the desert (from *India*, I presume) to *Aleppo*, “where it is used in substance, mixed with other perfumes, and worn in small “bags, or in the form of essence; and kept in little boxes or phials, like *âtar* “of roses.” He is persuaded, and so am I, that the *Indian nard* of the ancients, and that of our shops, is the same vegetable.

“I am not, indeed, of opinion, that the *nardum* of the *Romans* was merely the essential oil of the plant, from which it was denominated, but am strongly inclined to believe, that it was a *generick* word, meaning what we now call *âtar*, either the *âtar* of roses from *Cashmir* and *Persia*, that of *Cetaca* or *Pandanus*, from the western coast of *India*, or that of *Aguru*, or aloe-wood, from *Asam* or *Cochinchina*, the process of obtaining which is described by *ABULFAZL*, or the mixed perfume called *âbir*, of which the principal ingredients were yellow sandal, violets, orange-flowers, wood of aloes, rose-water, musk, and true spikenard: all those essences and compositions were costly; and most of them being sold by the *Indians* to the *Persians* and *Arabs*, from whom, in the time of *OCTAVIUS*, they were received by the *Syrians* and *Romans*, they must have been extremely dear at Jerusalem and at Rome. There might also have been a pure *nardine oil*, as *ATHENÆUS* calls it; but *nardum* probably meant (and *KOENIG* was of the same opinion) an *Indian* essence in general, taking its name from that ingredient, which had, or was commonly thought to have, the most exquisite scent.”

When the *Philosophical Transactions*, containing the Essay of Dr. BLANE, reached India, Sir WM. JONES supported his opinion by additional arguments; but their application is not much to our present purpose. He says,
“My

“ My own enquiries have convinced me, that, the *Indian Spikenard*, of *Dioscorides* is the *Sumbulu'l Hind*, and that the *Sumbulu'l Hind* is the *Jatamansi* of *Amarsinh*. I am persuaded, that the true Nard is a species of *Valerian*, produced in the most remote and hilly parts of *India*, such as *Népál*, *Morang*, and *Butan*, near which *Ptolemy* fixes its native soil: the commercial agents of the *Dévaraja* call it also *Pampi*, and by their account the dried specimens, which look like the tails of ermines, rise from the ground, resembling ears of green wheat both in form and color; a fact, which perfectly accounts for the names *Stachys*, *Spica*, *Sumbul*, and *Khúsh*, which *Greeks*, *Romans*, *Arabs*, and *Persians* have given to the drug, though it is not properly a spike, and not merely a root, but the whole plant, which the natives gather for sale, before the radical leaves, of which the fibres only remain after a few months, have unfolded themselves from the base of the stem. It is used, say the *Butan* agents, as a perfume and in medicinal unguents, but with other fragrant substances, the scent and power of which it is thought to increase: as a medicine, they add, it is principally esteemed for complaints in the bowels.”

Botanical Observations on the Spikenard of the Ancients: intended as a Supplement to the late Sir Wm. Jones's Papers. By Wm. Roxburgh, M. D.

VALERIANA JATAMANSI.

Generic Character.—Flowers triandrous, leaves entire, four-fold, the inner radical pair petioled, and cordate; the rest smaller, sessile, and sub-lanceolate; seeds crowned with a pappus.

The plants now received, are growing in two small baskets of earth; in each basket there appears above the earth between thirty and forty hairy spike-like bodies, but more justly compared to the tails of *Ermes*, or small *Weasels*; from the apex of each, or at least of the greater part of them, there is a smooth lanceolate, or lanceolate-oblong, three or five-nerved, short-petioled, acute or obtuse, slightly serrulate leaf or two shooting forth. [The term *spica*, or spike, is not so ill applied to this substance as may be imagined; several of the *Indian* grasses, well known to me, have spikes almost exactly resembling a single strait piece of *nardus*: and when those hairs (or flexible *arista-like* bristles) are removed, *Pliny's* words, *frutex radice pingui et crassa*,” are by no means inapplicable. See Nos. 3, 4, 5, 6, 7.] No. 6. represents one of them in the above state; and on gently removing the fibres or hairs which surround the short petiols of these leaves, I find it consists of numerous sheaths, of which one, two, or three of the upper or interior ones are entire, and have their fibres connected by a light-brown coloured membranous substance, as at *b*; but in the lower exterior sheaths, where this connecting membrane is decayed, the more durable hair-like fibres remain distinct, giving to the whole the appearance of an *Ermine's* tail: this part, as well as the root, are evidently perennial. The root itself (beginning at the surface of the earth where the fibrous envelope ends) is from three to twelve inches long, covered with a pretty thick light-brown

brown coloured bark; from the main root, which is sometimes divided, there issues several smaller fibres. No. 5, is another plant with a long root; here the hair-like sheaths, beginning at *a*, are separated from this, the perennial part of the stem, and turned to the right side; at the apex is seen the young shoot, marked *b*, which is not so far advanced as at No. 6; *ccc* show the remains of last year's annual stem. When the young shoot is a little further advanced than in No. 5, and not so far as in No. 6, they resemble the young convolute shoots of monocotyledonous plants.

June 1795. The whole of the above plants have perished, without producing flowers, notwithstanding every care that could possibly be taken of them. The principal figure in the drawing, marked No. 4, and the following description, as well as the above definition, are therefore chiefly extracted from the engraving and description in the second volume of the *Researches*, and from the information communicated to me by Mr. *Burt*, the gentleman who had charge of the plants that flowered at *Gaya*, and who gave Sir *Wm. Jones* the drawing and description thereof. [Which we have copied from the *Calcutta Edition*. Vide No. 3. Plate]

Description of the Plant.

Root, it is already described above.

Stem, lower part perennial, involved in fibrous sheaths, &c. as above described; the upper part herbaceous suberect, simple, from six to twelve inches long.

Leaves four-fold, the lowermost pair of the four radical are opposite, sessile, oblong, forming, as it were, a two-valved spathe; the other pair are also opposite, petioled, cordate, margins waved and pointed; those of the stem sessile and lanceolate; all are smooth on both sides.

Corymb terminal, first division trichotomous.

Bracts awled.

Calyx scarce any.

Corol one petaled, funnel-shaped, tube somewhat gibbous. Border five-cleft.

Stamens, filaments three, project above the tube of the corol; anthers incumbent.

Pistil, germ beneath. Style erect, length of the tube. Stigma simple.

Pericarp, a single seed crowned with a pappus."

.....

The result of these observations is: that there grew in Arabia and Syria a fragrant grass, which was considered as a *Nard*, and was probably known under that name. 2. That the true *Indian Nard*, or *Spikenard*, was a plant of a different kind, and not native of Syria. 3. That the *atar*, or essential fragrance of this plant, is called absolutely *nard*, or *spikenard*; and probably was known antiently under the same appellation.

I apprehend that these three particulars occur in Scripture; and that they deserve our attention. This word *nard* is repeated somewhat awkwardly, Cant. iv. 13, 14. "Camphire with *spikenard*: *spikenard* with saffron." Why should this plant be *twice* named? It will appear that this peculiarity struck us formerly, (vide "on SOLOMON'S SONG." FRAGMENTS,) and not without reason: but if we may suppose that the first *nard* means the Syrian or Arabian plant, (or the whole genus of scented grasses, "three sorts of *Nardin*") which

no doubt was well known to Solomon, whereas the second *nard* means the Indian *nard*, or true *spikenard*, then it is very probable that the words are clear, and that the latter word merely wants some discriminating epithet, answering to *spike*, which transcribers not understanding have dropped; or, that a different mode of pronunciation distinguished the names of these two plants when mentioned in discourse: [they are also differently *pointed* in the printed copies] and I think it worth observing, that the first word is *NARDIM* (*plural*). “*Copherim* (*Henna-plants*, plural) with *Nardim*,—*nards*.” But the following seems to be put absolutely, “*Nard* or *THE nard* (*singular*) with the *Crocus*.” This distinction, if admitted, and it certainly was admitted by the ancients, (and in the Arabic Dictionary of Natural History), as we have seen above, removes all difficulty, and justifies the passage.

The third acceptation of the term *nard*, or *spikenard*, occurs in the gospels. Mark, xiv. 3, mentions “*ointment* of *spikenard*, *very precious*,” which ver. 5, is said to have been worth *more* than three hundred pence (*denarii*); and John, xii, 3, mentions “*a pound* of *ointment* of *spikenard*, *VERY COSTLY*—the house was filled with the odour of the ointment—it was worth three hundred pence” (*denarii*). As this evangelist has determined the quantity—a *pound*—and the *lowest* value (for Mark says *more*) was *eight pounds fifteen shillings*, I think we may safely suppose that this was not a Syrian production, or an ointment made from any fragrant grass growing in the neighbouring districts; but was a true *atar* of Indian *spikenard*; an unguent containing the very essence of the plant, and brought at a great expence from a remote country.

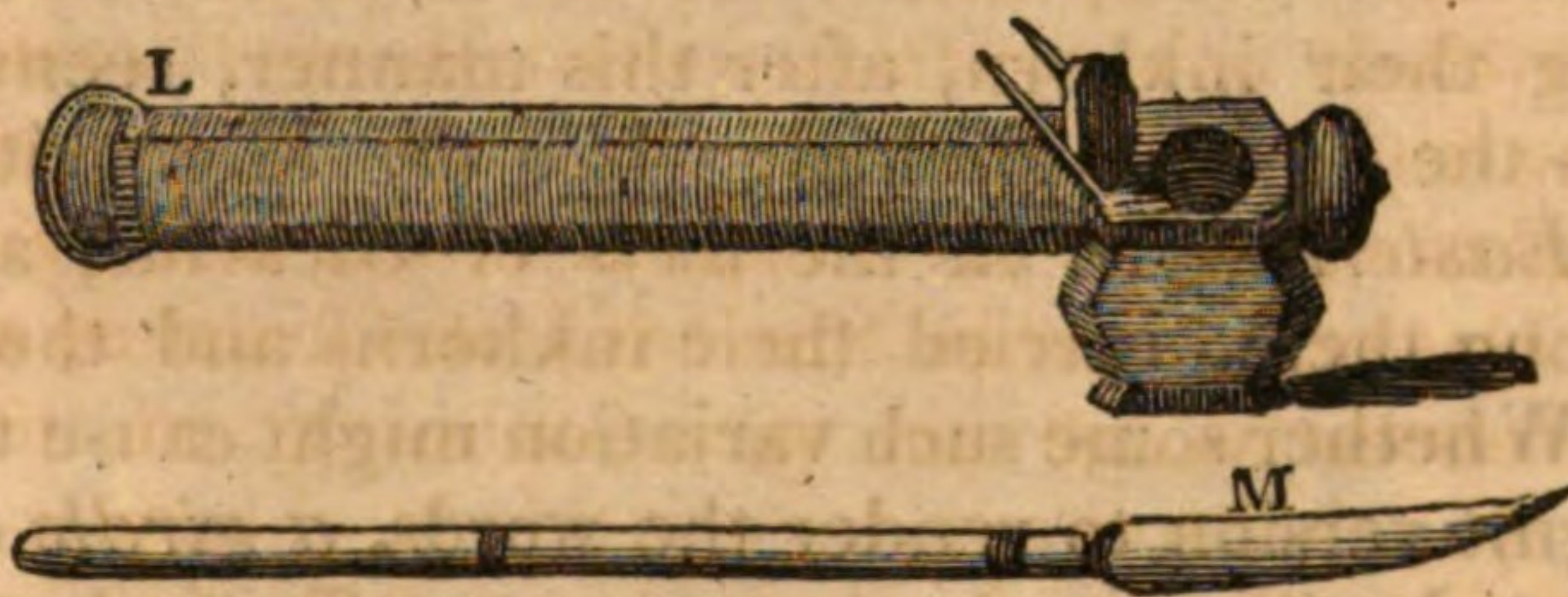
I would query also whether there might not be in the answer of our LORD, some allusion to the remoteness of the country from whence this unguent was brought: “wheresoever this gospel shall be preached throughout the *WHOLE WORLD* (*Χοσμον*)—shall be her memorial.” q. d. “This unguent came from a distant country, to be sure, but the gospel shall spread to a much greater distance, yea, all over the world; so that in India itself, from whence this unguent came, shall the memorial of its application to my sacred person, be mentioned with honour.” The idea of a far country, connected with the ointment, seems to have suggested that of “the whole world.”

The above instance, I think clear: perhaps, we may now revert with advantage to the Canticles, were we find the Bride saying, “My *spikenard* sendeth forth the smell thereof.” From the word *nard* being singular here, literally “my *nard* giveth his scent,” shall we say this was in the form of an “essence, in a small bag?” or, was it a number of sprigs of the fragrant grass, worn like a nosegay in the bosom of this fair lady? It is certain that the “savour of her good ointments” is mentioned, verse 3, as highly attractive: and that an *atar* of *spikenard* used for perfume, might be intended, needs no proof: but, if so, then we have this perfume in its artificial state alluded to, both in the Old and the New Testaments; and the passages which mention it, mutually illustrate each other.

INKHORN.

EZEKIEL IX. 2.

AND BEHOLD, SIX MEN CAME FROM THE WAY OF THE HIGHER GATE, WHICH LIETH TOWARD THE NORTH: AND EVERY MAN A SLAUGHTER WEAPON IN HIS HAND; AND ONE MAN AMONG THEM WAS CLOTHED WITH LINEN,—WITH A WRITER'S INKHORN BY HIS SIDE.



THIS figure is from Dr. Pococke, who describes it, as “an INKHORN, which the writers and tradesmen stick into their girdle; and it is very convenient, the top shutting down; at the end it opens; and pens, and a PENKNIFE, are put into it.”

The reader will recollect that the pens are usually of reed, *calamus scriptorius*: and that the characters of eastern writing are usually strong and black.

The following are Mr. HARMER's observations on this passage of the prophet:

“The modern inhabitants of Egypt appear to make use of *ink* in their sealing, as well as the Arabs of the desert, who may be supposed not to have such conveniences as those that live in such a place as Egypt: for Dr. Pococke saith, that “they make the impression of their name with their seal, generally of cornelian, which they wear on their finger, and which is blacked when they have occasion to seal with it.”

“This may serve to shew us, that there is a closer connection between the vision of St. John, Rev. vii. 2, and that of Ezekiel, chap. ix. 2, than commentators appear to have apprehended. They must be joined, I imagine, to have a complete view of either. St. John saw an angel with the *seal* of the living God, and therewith multitudes were sealed in their *foreheads*; but to understand *what sort of mark* was made there, you must have recourse to the *inkhorn* of Ezekiel. On the other hand, Ezekiel saw a person equipped with an *inkhorn*, who was to mark the servants of God on their foreheads, with *ink* that is, but how the ink was to be *applied* is not expressed; nor was there any need that it should, if in those times ink was applied with a seal: a seal being in the one case plainly supposed; as in the Apocalypse, the mention of a seal made it needless to take any notice of an inkhorn by his side.

EZEKIEL ix. 2.

“This

“ This *position* of the inkhorn of Ezekiel’s writer may appear somewhat odd to an European reader, but the custom, of placing it by the side continues in the East to this day. Olearius, who takes notice, *Voy. en Moscovie, &c. p. 857*, of a way that they have of thickening their ink with a sort of paste they make, or with sticks of Indian ink, which is the best paste of all, a circumstance favourable to their sealing with ink, observes, p. 817.—[Dr. Shaw also speaks of their writers suspending their inkhorns by their side. I should not therefore have taken any notice of this circumstance, had not the account of Olearius led us to something farther.]—that the Persians carry about with them, by means of their girdles, a dagger, a knife, a handkerchief, and their money: and those that follow the profession of writing out books, their *inkhorn*, their penknife, their whetstone to sharpen it, their letters, and every thing the Moscovites were wont *in his time* to put in their *boots*, which served them instead of pockets. The Persians, in carrying their inkhorn, after this manner, seem to have retained a custom as ancient as the days of Ezekiel; while the Moscovites, whose garb was very much in the *Eastern taste* in the days of Olearius, and who had many *oriental* customs among them, carried their inkhorns and their papers in a very different manner. Whether some such variation might cause the Egyptian translators of the Septuagint version to render the words, *a girdle of sapphire*, or *embroidery, on the loins*, I will not take upon me to affirm; but I do not imagine our Dr. Castell would have adopted this sentiment in his Lexicon, (see Lowth upon the place) had he been aware of this eastern custom: for with great propriety is the word *Keseth* mentioned in this chapter three times, if it signified an inkhorn, the requisite instrument for sealing those devout mourners; but no account can be given why this *Keseth* should be mentioned so often, if it only signified an embroidered girdle.” *Harmer’s Obs. Vol. II. p. 459.*

It should be recollected also, that in the East, the artisans carry most of the implements of their professions in their girdles; the soldier carries his sword; the butcher his knife; and the carpenter carries even his hammer, and his saw.

EXPLANATION OF THE FIGURES.

L is the INKHORN; its cover lifted up: it seems to resemble those among ourselves, which are made of leather; and which I think are known by the name of “Edinburgh inkhorns.”

M. The knife usually carried in the handle of the inkhorn: but in this instance, I presume it is too long for that purpose: as I do not perceive that it is capable of being divided, of being clasped, or otherwise shortened.



TOWERS, OR KIOSKS.

CANT. Chap. viii. Verse 10.

I AM A WALL, AND MY BREASTS LIKE TOWERS:

THEN WAS I IN HIS EYES AS ONE THAT FOUND FAVOUR.

THE character of the female sex has led them to a certain display of their bosoms; and we have seen in our own days, a mode of dress adopted, which did not tend to diminish the amplitude in point of appearance of this part of female beauty. Nevertheless, the women in the East are much more desirous than those of northern climates, of a full and swelling breast: in fact, they study the *plumpness*, the *enbonpoint* of appearance, to a degree uncommon among ourselves; and what in the temperate regions of Europe might be called an elegant slenderness of shape, they would consider as a *meagre* appearance of starvation. They indulge these notions to excess. It is necessary to premise this, before we can enter thoroughly into the spirit of the language before us: which we take the liberty to render somewhat differently from our public translation.

BRIDE. Our sister is little, and she hath no breasts: *being as yet too young; immature:*

What shall we do for our sister, in the day when she shall be spoken for?

BRIDEGROOM. If she be a wall, we will build on her [*ranges*] turrets of silver:

If she be a door-way, we will frame around her pannels of cedar.

BRIDE I am a wall and my breasts like *kiosks*,

Thereby I appeared in his eyes as one who offered peace [*repose; enjoyment.*]

CANTICLES, Chap. viii.

The

The ideas couched in these verses appear to be these, "*Our sister is quite young,*" says the bride;—*but*, says the bridegroom, "she is upright as a wall; and if her breast do not project beyond her person, as kiosks project beyond a wall, we will ornament her dress, [*q.* head-dress?] in the most magnificent manner with turret-shaped diadems of silver." This leads us to the reflection of the bride, understood to be speaking to herself, *aside*, "As my sister is compared to a wall, I also in my person am upright as a wall: and I have this further advantage, that my bosom is ample and full, as a kiosk projecting over a wall: and though kiosks offer repose and indulgence, yet my bosom offers to my spouse more effectual enjoyment than they do." This, it may be conjectured, is the simple idea of the passage; the difference being, that *turrets* are built on the top of a wall; *kiosks* project from the front of it. The name *kiosk* is not restricted to this construction; but includes most of what we call summer-houses, or pavilions.

There is another passage which our print illustrates, 2 *Kings* ix. 30:—"Jezabel painted her face, attired her head, and looked out at a window As Jehu entered the gate—he lifted up his face to the window . . . and said, "Throw her down," &c. If we suppose the window out of which Jezabel looked was one of those in the kiosk of our Print, we see how it might be over the gateway at which Jehu was entering; how he might lift up his face toward the window which he was about to enter; how her blood might be sprinkled on the wall, and on the horses of Jehu's chariot, when she was thrown down; and how he might trample her under foot, *i. e.* of his horses; verse 33. In short, the whole of the story becomes more circumstantial, by connecting this idea of the *kiosk* with it, as the station of the idolatrous queen of Israel on that occasion.

That a kiosk—a projecting kiosk, was a common situation from whence to behold a triumphant entry is implied in the song of Deborah, who represents the mother of Sisera as looking out of a window, and crying through the lattice, "Why is his chariot so long in coming?" Our Print shews these parts distinctly; the window, and the lattice; it shews too, how by its projection from the wall, a structure of this kind commanded the view of a whole street; so that no situation could be more suitable for enjoying the sight of a procession; also, as apparently the being in the *kiosk* implies a place of pleasure, *gala* expectations, it renders the understood reverse of defeat instead of triumph, more bitter, more poignant.

"At the upper end of the room there is sometimes a light wooden kiosk projecting from the body of a building, and supported in the manner of a balcony. It is raised a foot and a half higher than the floor of the Divan, of which it forms a continuation, and is decorated in the same fashion. It is nearly of the same breadth with the room, but the ceiling is lower, and having windows on the three sides it is more airy." RUSSELL'S ALEPPO, p. 28. "Some of the Marubba [first floor chambers of the women] have handsome kiosks projecting over the shrubbery." p. 32.

This is something like the bow, or bay, window, of our ancient houses.





PLATE I. THE TWO FIGURES.

OF FEMALE DRESS, IN THE EAST.

ISAIAH, CHAP. III. VERSE 18.

ARTICLES of dress, especially of Female dress, are so capricious, that having been used they are laid aside, and being laid aside they are forgotten: we know this to be fact in respect to the fashions of our own country, and much is the most learned British antiquary puzzled to appropriate to their uses the kinds of apparel, and their parts, which occur in the descriptions of our ancient writers. If this be the case in our own country, there can be no wonder, that we should be more than equally embarrassed when endeavouring to explain and elucidate passages of the Sacred Writings where articles of dress are mentioned.

As we differ considerably from all commentators who have endeavoured to determine the various parts of dress worn by a Hebrew lady, as mentioned by the prophet in the passage under consideration, we beg leave to offer our reasons for such differences. The following is the rendering of our public version; and underneath it, in italics, is that of Bishop Lowth.

In that day, the LORD will take away the bravery of
.....from them the ornaments of

-עכסים
Ocasim
-שבסים
Shebisim
-שהרנים
Sheharenim
-נטפות
Nethephut
-שרות
Sharut
-רעלות
Rolut
-פארים
Parim
-צעדות
Tjodut
-קשרים
Kesharim
-בתי הנפש
Beti henephesh
-לחשים
Lechashim

- 1. Their tinkling ornaments about their feet.
The Feet Rings.
- 2. And their eauls, [or net works. *Margin.*]
The Net-works.
- 3. And their round tires like the moon.
The Crescents.
- 4. The chains, [or sweet balls. *Margin.*]
The Pendants.
- 5. And the bracelets.
Bracelets.
- 6. The mufflers.
The thin Veils.
- 7. The bonnets.
The Tires.
- 8. The Ornaments of the legs.
The Fetters.
- 9. And the head-bands.
The Zones.
- 10. And the tablets, [houses of the soul. *Margin.*]
The Perfume Boxes.
- 11. The ear-rings.
The Amulets.

12. The

ISAIAH, CHAP. III. VERSE 18.

..... טבעות
Thebout

..... נזמי האף
Nezemi heaph

..... מחלצים
Mechaletjim

..... מעטפות
Meothephut

..... מטפחות
Methephechut

..... חריטים
Charithim

..... גלינים
Gulinim

..... סדנים
Sidinim

..... צניפות
Tseniphut

..... רדידים
Radidim

12. The rings.

The Rings

13. The nose jewels.

The Jewels of the nostrils.

14. The changeable suits of appare

The embroidered Robes.

15. And the mantles.

The Tunics.

16. And the wimples

The Cloaks.

17. And the crisping pins.

The little Purses.

18. The glasses

The Transparent Garments.

19. The fine linen.

The fine linen Vests.

20. And the hoods.

The Turbans.

21. And the veils.

The Mantles.

And instead of a sweet smell, there shall be a stink.

Instead of perfume, a putrid ulcer.

And instead of a girdle, a rent;

Instead of well girt raiment, rags.

And instead of well set hair, baldness,

Instead of high dressed hair, baldness;

And instead of a stomacher, a girding of sackcloth.

Instead of a zone, a girdle of sackcloth.

And burning instead of beauty.

A sun burnt skin, instead of beauty.

Our endeavour will be, to shew each of these parts of dress, distinctly:—most of them are still worn in the east; and the certainty of some of them will enable us to judge sufficiently on the nature and application of others.—Each of these words will engage attention in its order, as numbered.

We are rather unfortunate in differing from every translator and lexicon on the meaning of the very first word; which has been universally rendered in reference to the feet, or legs. This might be just, if the prophet, *beginning at the feet* went regularly *upwards*, in describing the dress: but, having presumed to think, that he begins at the head and goes *downwards* [as observed formerly of the Bridegroom, in *Solomon's Song*] it follows necessarily, that to make him *begin* at the feet, and instantly skip to the very summit of the head, would be doing him great injustice, as a poet.

No. 1. The meaning of the root *oces* is, *to tie up, to bind*: and for the present the reader will indulge the reference of this word to the *binding* of the hair; to the tying it up in rolls, or other artificial forms.

No.

No. 2. The word *Shebisim* signifies *reticula*, net works. Our translators have accepted the true idea of it, by rendering *cauls*; meaning, net work for the hair. The reader will see on Plate I. No. 16. a specimen of this kind of ornament, as worn anciently at Syracuse; also in No. 17. The reader will observe also the natural connection of the band which ties up the hair, the oces of No. 1. with the *reticula*, or *caul*, of the present number.

No. 3. The *Sheharinim*, *lunulae*, crescents—crescent-like tiaras. This also is a part of the present Eastern head-dress. In Nos. 13, 14, Plate I. the reader will find two specimens, copied from Sir JOHN CHARDIN, who considers them as the true *tiara*, or diadem of the queens of Persia. No. 13 is circular downward: No. 14 is circular upward; and this I presume, is the *lunula*, it having much of that crescent-like form which is a usual appendage to figures of the *Dea Luna*; wherein the horns of the crescent pointing upward, resemble the horns of an animal. In this shape it is still worn by the women of some countries. This article, then, is clearly a part of the head dress.

No. 4. The chains, *Netaphim*, or rather the *drops*, or pendants. Mr. LEVI says, "By what I have been able to collect from the Jewish commentators, it appears, that they were a kind of necklace made of pearl beads; hence their derivation, either from falling, or dropping, down the bosom, or from the bead; for *Kimchi* observes, the *bdellium*, or pearl, is called in Arabic *al nataph*." The word occurs also, Judges, viii. 26.—"beside the *sheharinim* little moons—*lunettes*, and the *netaphut*—drops:" now these *drops*, though they might be necklaces, worn by the kings of Midian, yet they might be drops of another kind; [vide Plate IX. Solomon's Song,] for instance, jewels appended to their *tiaras*, or turbands, for so the passage stands, connecting (apparently) one with the other; and so, I apprehend, it stands in the passage before us; and, I think, these are ornaments appended to the tiara, which, of course, keeps the prophet's description still in the head dress.

No. 5. *Bracelets*. Bracelets are ornaments for the arms: but, apparently, we are yet attending to the head-dress; and therefore, as the import of this word is *chains*—little chains, I suppose them to be a connection of ornament, attached to the tiara, perhaps, a pattern wrought on its front; or perhaps hanging loosely over it. N. B. If this root denotes a coat of mail, the tiara is equally capable of receiving this kind of *imbrication*, or any other, as ornament to its surface. Nos. 13, 14. *a. a.* Plate I.

No. 6. It is probable the word *Roluth*, which signifies *shakings*, denotes some *trembling* ornament; some glittering sprig of *spangles*, perhaps:—that such an article of jewellery work may easily be attached to the head, needs no demonstration. Perhaps it is analogous to the feathers of Nos. 13, 14, 15. Plate I. whose tremulous motion is characteristic. [Vide Plate VI. on Solomon's Song.]

No. 7.

No. 7. *Parim* is, certainly, what covers the upper part of the head. We have seen the *tiara* in front; but this is on the *upper* part; therefore is well meant by the rendering of our translators, *bonnets*. This appears from Isaiah, lxi. 3. "*instead of ashes*—which were strewn on the *upper* part of the head,—"*parim*—beauty," rather beautiful bonnets:—and especially that part technically called the head-piece, or crown of the bonnet. Vide Nos. 13, 14. *b. b.* in which it is seen distinct from the *tiara*.

If we revise these particulars, we shall find, that all hitherto mentioned belong to the head-dress; so that it seems reduced nearly to a poetical impossibility, that the prophet should, in the first article intend an appendage to the legs, and in the six following articles refer wholly to decorations of the head. The words stand thus, 1. the ornamental Cinctures for tying up the hair, and going round the head; 2. the Net-work for enclosing the hair, especially that part of it at the back of the head; 3. the crescent-like Tiara, in front of the head dress; ornamented with 4. Drops, jewels, or gold; also with 5. Chains hanging *loosely* over it; also with 6. Sprigs, or even feathers, of jewellery, AGITATED by every motion of the head. 7. The crown of the whole bonnet, or the head piece, covering the top of the head. These articles follow each other so aptly, and are so strongly connected by propriety, that the very arrangement of them determines their situation and character.—We proceed to

No. 8. *Ornaments of the legs—Fetters*. Translators have been fond of ornamenting the legs; they began with this, and here they repeat it, but, to what effect, if the first word had already accomplished the purpose? Translators also have forgot that the arms were adorned with golden, &c. fetters; were ornamented, no less than the legs, with rings, worthy from their size, of the name of *shackles*: and which, says Herodotus, a king of Ethiopia refused to accept, being influenced by such an opinion of them. The word in the original is *tjoduth*: and this we find formed part of the distinguishing *regalia* of king Saul: and is expressly attached to his arm, 2. Sam. i. 10. "the Amalekite brought his crown; and the (*tjodeh*) bracelet which was upon his arm." Here we observe that the word is *singular*; so that it appears Saul wore only *one* bracelet, *i. e.* on one arm—suppose the right arm; but, in our text, the word is *dual*, or *plural*; bracelets,—one for each arm; being worn by women. Plate I. shews these bracelets clearly enough. Nos. 5, 6, 7, A. B.

No. 9. *Kesharim,—the Head-bands;—the Zones*. This word signifies *to bind*. I have been inclined to render it belt, or *sash*, for the waist: but, observe that the prophet spoke last of the arm, and may still be speaking of it; also, that Jer. ii. 32, a bride is said not to forget her *kesheri*,—in the plural; whereas, she would not want *two* sashes for her waist. Perhaps this word means *collets*, belts for the neck, to which the following article might be appended, and might hang from it, by chains, &c.

No. 10. *The Tablets—Perfume boxes.* Here, I suppose, the prophet alludes to the wearing of perfumery in the bosom; that this was customary, we learn from the thought of the Bride in Solomon's Song, "it—the bag of perfume—shall be continually in my bosom," that is to say, the fragrance of the *Henna* shall constantly accompany me. Vide on *Solomon's Song*.

No. 11. *The Ear-rings;—Amulets.* The import of this word is, *to whisper; the whisperers*; whence the idea of *ear-rings* is attributed to it. It is certain, that we have as yet had no mention of this capital part of an Eastern Lady's head dress; and no word more proper to denote this occurs in the description. Certainly, however, if this word describes an ornament for the ear, it does not mean *rings*; but perhaps an ornamental composition of gems, pendants, &c. of which we observe many varieties on ancient medals.

No. 12. *The Rings;—*meaning, I presume, rings for the finger; which being adorned with gems, and precious stones, have always been considered as an ornamental part of dress. This appears from the instance of Pharaoh; who took the *ring* from off his finger, to put it on that of Joseph. This no doubt was a seal-ring, Gen. xli. 42. See also Esther iii. 10. viii. 2.

No. 13. *The Nose-jewels.* It may be thought not absolutely *indisputable* whether this word denotes, in this place, rings, worn in the nostril; *possibly* it may be a jewel worn on the forehead, and hanging down to the nose; for it seems, that the servant of Abraham, Gen. xxiv. 22. put a *nezem* (the word is *singular*) *upon*, or *over* (על) the nose of Rebekah. We can hardly think that if the nostril of Rebekah was not already perforated, that Eliezer perforated it at this moment: he had surely neither leisure for such an operation, nor conveniences, and if a ring were already in her nostril, (which may be doubted) how, or why, add another? whereas if the jewel were a pendant of the nature of that in Nos. 11, 12, Plate I, it might be readily appended, whether in addition or not, to the cap, or the hair, and so *hang down over the nose*. But observe, nothing is hinted of a gem, or precious stone, in it, which seems to be essential to a forehead-jewel. The weight of this ring was half a shekel of gold; whereas, the weight of the arm-rings was twenty times as much;—ten shekels. I doubt whether young women of the better ranks of life wore rings *in their nostrils*. Many translators understand this word as signifying occasionally, *rings for the face, i. e.* for any part of the face: which is not denying that it means also, elsewhere, a ring for the nostril.

These articles we find, then, are decorative jewels, displayed on various parts of the person: as,—8. Bracelets, rings for the arms.—9. Collets, for the neck,—10. Perfume-Boxes, hanging from the Collets, down the neck, or into the very bosom, of the wearer.—11. Pendants for the ears.—12. Rings for the fingers, studded with precious stones.—13. Jewellery, knots of gems, pearls, &c. for the forehead. The similar nature of these articles connects them very strongly; and leads to a belief of their having being properly understood, and referred, by us.

No.

No. 14. *Changeable suits of Apparel*;—*mechaletjim*. This was the external *surtout*, or robe, put on, and taken off, occasionally. It was worn by men;—so we read, Zech. iii. 4. “take away the filthy garments from Joshua, the high Priest, and clothe him with new outer garments,—*mechaletjuth*,” this is confirmed by Judges, xiv. 19. Sampson slew men and took their thirty *chalitjuth*,—upper dresses, which he gave to those who had expounded his riddle;—and the prophet, in the passage before us, says it was worn by women. The reader will observe some slight changes in these words, though radically the same; no doubt the dress differed for the sexes, and wearers. We see it to advantage in Plate II.

No. 15. *The Mantles*.—The nearest resemblance to this among ourselves is, probably, the hood to a cloak, when drawn by the wearer over her head, to shelter her head and face: it is properly rendered therefore by our Translators, *mantles*,—in modern language, *cloaks*. Lady Montague says, Letter 29. “No woman of what rank soever, is permitted to go into the streets without two *murlins*; one that covers her face all but her eyes, and another that hides the whole dress of her head, and hangs half way down her back.” This then was a garment put on, and taken off, occasionally: consequently, it succeeds the former with propriety.

No. 16. *The Wimples*—*cloaks*; *methephechut*: This is the half veil of *f*. No. 15. Plate I. [Vide FRAGMENT No. CLIX. Page 154.]

No. 17. *The cringing Pins*—*little Purses*:—*charithim*. The meaning of this word is, a *bag*; so we read, 2 Kings, v. 23. Naaman bound two talents of silver in two *charithim*, bags, or, cases made of linen, &c. *envelopes* proper for their enclosure; this, I think, is identically the description of a Turkish Lady's *drawers*; which are *bags*, or cases for the legs; and, as drawers are universally worn in the East, and are absolutely indispensable, the prophet could hardly omit all mention of them: and besides, this is the proper place for them, in the order he has adopted; as this is the first-mentioned garment which is *constantly* worn as apparel.

No. 18. *The Glasses*,—*transparent garments*: The drawers are worn close to the person, covering the lower parts; next over these is worn a thin *gauze* shift, covering the whole of the person; in the upper parts being next to the skin, in the lower parts being *outside* the drawers. This I take, without hesitation, to be the article intended.

No. 19. *The fine linen*—*fine linen Vests*: *Sidanim*. This is apparently the *vest*. In the figures we submit to the reader, Plate II, it is not a *linen* vest, but of embroidered silk; and that this was an *enriched* part of dress, and worn by men of opulence, we learn from Samson's promise of such to his companions, Judges xiv. 12, 13. thirty *sidanim*; not habits of slaves or peasants, but of persons of property. It was worn, then, by both sexes. In confirmation we observe

observe that the girdle is connected with the *Sidin*, Prov. xxxi. 24. "The virtuous woman maketh the *Sidin* and selleth it: and the girdle also she delivereth to the merchants." Since then these are mentioned in connection, it is fair to presume that they were worn together.

Subsequent observation seems to justify the conjecture that the *Sidin* was of the nature of a Shawl, worn by both sexes, and was, it is probable, named *Sindon*, from the *Sind*, or Indus, River. It appears that *Hindoo*, (India) is written *Hiddu* in the Hebrew of Esther i. 1. and there are other Hebrew words in which the consonant is dropped; as *lapad* for *lampad*; a lamp. The fine shawls of Cashmere, were no doubt, the originals; but they might be imitated antiently, in other countries, as they are at present among ourselves.

No. 20. *The Hoods,—Turband; tjeniphut.* This word signifies *to withe—to wrap around*. In this place it means precisely, I apprehend, the *sash*, or waistband, of linen, silk, &c. rolled around the waist; answering to the girdle; an article which is otherwise omitted in this description; surely contrary to propriety. [See this Wrapping Girdle in Plate VI. *Solomon's Song*.] It does not appear in our present figures.

No. 21. *The Veils,—Mantles.* The *radid* we have proved elsewhere, [FRAGMENT No. CLXV.] to be a long deep veil, covering the whole of the person. This long deep veil, being an entire external envelope, worn as a beautiful part of dress, by brides and married women, and indeed being the only part of dress seen by spectators when a woman is walking abroad, closes this description with propriety. Neither of our figures has this veil on, as it would conceal the other parts of the dress. It may be seen in the Plate to the FRAGMENT, referred to above; or, may be conceived of, as a sheet of delicate drapery, wholly enclosing the wearer.

Thus we see, that these articles also, are connected by their nature;—Garments to be put on and taken off occasionally, are, 14. The external Robe, 15. The Hood; 16. The half Veil. Garments to be worn continually are, 17. Drawers, 18. Shift of gauze, 19. Embroidered Vest, 20. Sash. A close to the whole, is 21. The long Veil, which effectually conceals the person, and is worn only out of the house, being laid aside when at home.

Let us now observe the order, the accurate order, maintained by the prophet in his description; while we endeavour to justify the particulars, by a proper division and association of them, and by reference to our Plates.

THE HEAD DRESS.

1. Band for tying up the hair, vide Plate I Nos. 16, 17.
2. Net Cap, *Reticula*, vide Nos. 16, 17.
3. Crescent, *Tiara*, vide Nos. 13, 14. *a. a.*
4. Drops, appended to the *Tiara*, vide Nos. 11, 12.
5. Loose Chains, vide the pattern on the front of the *Tiara*, which is varied according to the taste of the wearer, Nos. 13, 14.
6. Feathers of Jewellery.
7. Head Piece of the *Tiara*, Vide Nos. 13. 14, *b. b.*

ORNAMENTAL JEWELS.

8. Bracelets, vide 5, 6, 7. Plate I. also Plate II.
9. Collets for the Neck.
10. Perfume Boxes.
11. Pendants for the Ears.
12. Jewellery rings for the fingers.
13. Jewellery rings for the forehead, Nos. 11. 12.

OCCASIONAL GARMENTS.

14. External Robe. Plate II. A. B. This robe is richly lined with fur. [For a figure without this external robe, vide Solomon's Song, Plate V.]
15. Hood.
16. Half Veil, vide Plate I. No. 15.

CONSTANT GARMENTS.

17. Drawers, vide Plate I. No. 10. A. A. the same Plate II. B.
18. Gauze Shift, vide Plate I. No. 10. B. Plate II. A. B.
19. Embroidered Vest, vide Plate II A. B.
20. Sash.
21. Long Veil.

The order and connection of the articles preclude any considerable doubts on the nature of them, respectively; that we should be able to exhibit the pattern of each, as worn in the days of Isaiah, is not to be expected: it is enough, if we approach so near to an explanation of the particulars, as to shew, that this passage of Holy Scripture, hitherto relinquished as inexplicable, may be so far at least explained, as to be relieved from the obscurity which attends it.

We have trusted entirely to that evidence offered to the judgment and view of the reader, which arises from an orderly arrangement, and association of the parts of dress, and the representation of them in our plates: to have entered deeply into *verbal* disquisition on a subject like the present, might have rather bewildered both writer and reader by an ostentation of learning, than have communicated that information which is the object of our researches.

PLATE I.

PLATE I.

This plate contains, in the uppermost row of figures, delineations of Ornaments which are adopted by the women in the East, for purposes of personal decoration. The first four Numbers are from Dr. Pococke's Travels in Egypt, who thus explains them.

No. 1. The NOSE-RING. "The common women, especially the blacks, wear rings in their noses; into the rings a glass bead is put by way of ornament."

No. 2. The EAR-RING. "They wear on their ears large rings, three inches diameter, that come round the ear, and are not put into it: These are ornamented like the figure."

No. 3. The LEG-RING. "They wear also such things as the figure, round their naked legs, most commonly made of brass among the vulgar."

No. 4. The BRACELETS. "These are commonly a work of wire. There are some of gold, finely jointed; the most ordinary sorts are of plain iron, or brass."

"Whenever the women go out to wash at the river, or to fetch water, they put on all their attire, and appear in full dress."

The Doctor's delineations being of each article, separate, not as worn,

Nos. 5, 6. Shew the mode of wearing the Bracelets on the arm. These examples have *two* rings; but often four or more are worn, at the same time. [Vide Plate of Arabian Dresses, FRAGMENT, No. LXI. page 109.]

No. 7. A couple of Egyptian dancing girls from Mr. DALTON. These girls have rings in their ears, and in one nostril, also. Mr. DALTON observes, "the rings in their nostrils and ears are *very large*." N.B. The ring of one is in the *right* nostril; the ring of the other is in the *left* nostril.

No. 8. Rings, worn on the leg. These rings are single: but often two, or more, are worn together: the jingling they make may easily be imagined.

No. 9. A similar article, from the Antique: forming part of the ornaments of a Venus.

No. 10. The modern Turkish sandals, which tend greatly to give an appearance of height to the wearer. The drawers A. A. which almost cover the foot, are worn *under* the shift, B. B. which is seen coming over them, and for the most part covering them. [Vide Plate V. p. 132. *On Solomon's Song*.]

No. 11. The head dress of a lady of Persia, from the Hundred Prints of Levant dresses; it shews—the jewel hanging on the forehead,—ear-rings,—necklace,—embroidered cap, &c. The figure is given at full length in Plate VI. *On Solomon's Song*.

No. 12. Shews also the jewel on the forehead, the ornamental cap, &c.

No. 13. A head dress from CHARDIN: it shews the lunulated tiara, with

ISAIAH, CHAP. III. VERSES 18, &c.

its

its ornaments—its crown, or head-piece,—the feather,—rows of pearls, adorning the cheek,—the necklace, &c.

No. 14. Another from CHARDIN: it shews the tiara—with its ornaments,—its crown, or head-piece,—the feather, &c.

No. 15. Another from CHARDIN: it shews the half veil—the forehead-band,—the rows of pearls, adorning the cheeks,—the feather, &c.

No. 16. Shews the ornamental *bandeau* for tying up the hair,—the net-work caul, for containing the hinder part of the hair,—ear-rings,—and necklace. This is a coin of Syracuse.

No. 17. Another coin of Syracuse; it shews a band tying the hair,—and a net-work caul, or *Reticula*, ornamenting the hinder parts of the hair. Possibly these nets were of silver meshes; if so, they are justly enumerated among the luxurious ornaments of dress. Comp. Cant. vii. 5.

Some of these articles may bear remark: first, the jewels attached to the nostril and ears. Mr. HARMER has quoted some very strong things said by Sir J. CHARDIN in his MSS. which I transcribe.

“ Let us now see what the notions of the East are, of which Sir J. Chardin has given a large account in Vol. VI. of his MSS. The import of the Vulgar Latin translation (says this gentleman) is, I have put ear-rings upon her to adorn her face. The modern Bibles, such as that of Diodati and others, translate it, (conformably to the Arabic and Persian versions) I put the ring upon her nose. It is the custom in almost all the East, for the women to wear rings in their noses, in the left nostril, which is bored low down in the middle. These rings are of gold, and have commonly two pearls and one ruby between, placed in the ring. I never saw a girl or young woman, in Arabia, or in all Persia, who did not wear a ring after this manner in her nostril. It is without doubt of such a ring that we are to understand what is said in this verse, Gen. xxiv. 47. and not of those Diodorus speaks of, and which he says the women attached to their foreheads and let them hang down upon their noses. I have never seen or heard speak of any such thing in all Asia. The women of condition there, indeed, wear jewels on their foreheads, but it is a crotchet like those worn in France in the beginning of the seventeenth century, to which they hang on three or five bobs; but these jewels do not descend lower than the forehead. I have many times seen at Babylon, and in the neighbouring countries, women with their ornaments, and have always seen these rings in nostrils. I have seen some of them with pearls from . . . to twenty-four grains, among the jewels of the greatest Princesses of Persia; but nothing like the rings mentioned by Diodorus. We ought also to understand Isaiah, iii. 21. and Ezek. xvi. 12. of these nose-jewels; and to look upon this custom of boring the nostrils of the women as one of the most ancient in the world.”

It

It is undeniable, that women in the East wear rings and jewels in their nostrils. Dr. Pococke and Mr. Dalton confirm the account. But these Gentlemen rather confine it to the lower class of women; and it certainly is an ornament adopted, or declined—at the pleasure of the wearer. It does not occur in the Hundred Dresses of the Levant, or in Niebuhr, or in the *superior* dresses of CHARDIN himself. I incline therefore to think, that though general among the “common women,” yet it is by no means *general* among women of rank. If this be just, then the word rendered *nose-jewel*, and, undoubtedly, sometimes meaning a ring for the nostril, may *occasionally* signify a jewel worn on the forehead, hanging over the nose, as described by *Diodorus*, and understood by Bishop Patrick, on Gen. xxiv. 22.

Nose-jewels, or rings for the nose, appear to be hinted at in several places of Scripture. Certainly, a gold ring with precious stones in it—diamonds, for instance, would be ill bestowed on the snout of a swine; the creature would destroy its lustre, by plunging it in filth: such, says Solomon, is female beauty, when *worn* by indiscretion. Prov. xi. 22.—

As a *nezem*—ring—of gold in the snout of a hog

Is a woman, bedecked, [splendidly ornamented] but starting aside from discretion.

—or, if we adopt the reading of the *keri* (רצה *retjeh*. instead of פה *ipeh*) “a woman fondled, doated on, won by over-weening favours, but indiscreet.”

EAR-RINGS are mentioned in many places of Scripture; and appear to have been worn by both sexes. The prophet *Ezekiel*, xvi. 12. speaks of putting ear-rings into the ears of a woman, as an act of affection; and *Hosea* ii, 13, says of a woman, “she decked herself with her *ear-rings*.” This article needs no enlargement; but it deserves notice, that *Ezekiel* says, he put *circles* upon her ears; meaning, I presume, not drops, nor pendants of gems, but such large rings, as are worn by both our dancing girls, No. 7. [or, by the Egyptian woman, *Fig. K*, FRAGMENT CLXIV, Plate] which go fairly round the ear, rather than hang in it. Such, I presume, is one distinction; and such are the *ogelim*, ‘circles for the ears’ of the prophet.

For *ear-rings* worn by men, see Judges, viii. 24. “they gave to Gideon the *ear-rings* of the prey—for they (the soldiers taken captive, &c.) had golden *ear-rings* because they were Ishmaelites.” We find also, that among the presents made to Job, chap. xli. 11. were *ear-rings*. And this custom seems to determine the spirit of the wise man’s observation, Prov. xxv. 12.

As an ear-ring of gold, and an ornament of fine gold,

Is a wise reprovcr upon an obedient ear.

This simile would be frivolous, if ear-rings had not been worn by men; since the reprovcr is not supposed to confine his reproofs to the fair sex.

It is clear, from the allusion, that the Hebrew word *nezem* means an *ear-ring*, a ring worn specifically in the *ear*, in this passage; as it does also in Judges: for rings worn in the nose by men, would be, I believe, altogether singular in Scripture.

Scripture. See also Gen. xxxv. 4. But we must not restrain the import of the word *nezem*, to a ring for the ear, especially when used in the singular; though possibly we may when used in the plural; for, as *one* ring could not serve *both* ears, so *two* rings would be ill designed for one nostril; and it does not appear that both nostrils are, at the same time, thus decorated. This rather decides against the version of our Translators, in the history of Abraham's servant, Gen. xxiv. 22. "The man took a golden ear-ring—*nezem*—" "ITS weight half a shekel:" this being so expressly singular, cannot mean, as propriety requires, a *pair* of ear-rings; not to insist, as the fact is, that that text is, literally, verse 47, "I put the *nezem* on her *nose*." Whether this ornament was designed for her forehead, whence it hung over her nose, or was put into her nostril, which is not specifically mentioned, may admit of different opinions: that it was one or other, there can be no doubt.

A second remark is, that Dancing Girls, who are singers and dancers alternately, were known in David's time, and in David's court; for a company of them usually forms a part of the train of an Eastern Monarch; to this alludes the reflection of Barzillai, 2 Sam. xix. 35. that, at his age, he could no longer enjoy the exertions of singing men and singing women to please their auditors.

It seems to me, that the prophet Isaiah also, chap. xxiii. 15. alludes to the perambulations of dancers and singers; he says of Tyre, "she shall be forgotten seventy years; at the end of which she shall sing as a harlot. Take a harp, go about the city, make sweet melody, sing many songs, that thou mayest be recollected." This is an exact description of the conduct and behaviour of the dancing girls of the East: and may be thought to hint at solicitations employed by this city to renew her commercial connections in various kingdoms, &c, from which she had been interdicted for a time.

PLATE II.

What remarks we might have made on this Plate, are so interwoven with reasonings on the parts of dress already given that we shall not repeat them.

Fig. A. Habit of the Sultana Queen in the Grand Seignior's Seraglio; we may therefore suppose it to be by no means deficient in elegance, or fashion. The same gauze shift which covers the bosom reaches down to the very toes; the vest is long, richly embroidered; the girdle is set with precious stones; the outer robe is lined with fur.

Fig. B. Is raised on her sandals, though not to the "stature of the palm-tree;" her drawers nearly cover her feet; her gauze shift, which covers her bosom, comes down very low over her drawers; her vest is enriched with embroidery, &c. but is short; her girdle differs from that of the other figure; and her gown, or outer robe, is trimmed only, not lined, with fur. The black ribbon thrown across the neck, the bracelet on the arm, and the head-dress, will not escape the reader's attention.



WILLIAM L. BROWN, 1841

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... in elegance, or fashion.
... down to the very feet;
... rich precious stones;
...
Fig. B. is rather less stately, though not so the "stature of the palm-
... her dress nearly covers her feet; her gause shift, which covers her
... her dress is enriched with em-
... from that of the other figure;
... with fur. The black
... the head-dress
... the reader's attention.

DRE



EASTERN DRESSES. Plate II.

ATTEMPTS TO ASCERTAIN THE COCKATRICE OF SCRIPTURE.

ON consulting in the EXPOSITORY INDEX, the passage in Isaiah in which this creature is mentioned, it will be seen that we regretted the scantiness of that information communicated by Mr. FORSKALL on the *Batæn*, or *Peten*, as we suppose, of this passage; but, though his information be scanty, if it may serve to identify the subject intended, it has afforded advantages greatly beyond what we possess in our present investigation, wherein we are surrounded by difficulties on all sides, and must grope our way out of them as well as we can.

In considering the context it appeared reasonable to suppose, that the word rendered *den* or *cavern*, was of a *dual* import; and there is cause for suspecting, that the word *tjephoni* is *dual* also, and signifies a pair, or couple, of these serpents.

We shall endeavour to combine what information Scripture gives us respecting these *tjephoni*.

1. Our text says, "They shall not *hurt* nor (destroy) *corrupt* in all my holy mountain." This *corruption* I attribute to the *tjephoni* mentioned (for by the order of the words, such seems to be their reference) and, this leads to a serpent whose bite produces a *corruption* of the fluids, &c. in the subjects bitten.

2. In Prov. xxiii. 32. we read, "Wine shall bite as a serpent, *nahash*, and shall *sting* like *tjephoni*." The word rendered *sting* signifies to *spread*, *diffuse* its poison: so lxx. and Vulgate. It is used with singular propriety in this simile; as it imports to *unfold*, *develope*, bring to light, or into activity, somewhat before concealed, secluded, or *latent*: such is, certainly, the poison of a serpent, which is usually quiescent, and concealed in its fangs; but, when they are in action, a wound apparently insignificant, diffuses the most direful effects throughout the whole frame of that person, who has been so unhappy as to have received their attack.

In Isaiah, chap. xiv. 29. we read, "From the root of the serpent, *nahash*, shall come forth *tjepho*:" [a cockatrice, Eng. Tr.] It is clear, that a serpent of a worse kind than the *nahash* is intended in this passage. In chap. lix. 5. the *tjephouni* are described as producing eggs; *i. e.* are *oviparous*. "They hatch the eggs of the cockatrice—he that eateth of their eggs dieth:—or if one of these eggs be crushed, it breaketh forth into a viper:" [אֶפְחָה, *aphoeh*]. This is a very remarkable passage: it implies, 1. That serpents' eggs may be mistaken for those of birds, (hens, &c.) and may be eaten under such mistake; 2. That it was well known in antiquity, that *some* venomous serpents were *oviparous*; 3. I think, too, the action of the young serpent, when the shell of the egg which contains him is crushed, is hinted at.

The prophet Jeremiah also, chap. viii. 17. speaks of *serpents cockatrices*, [נַחָשִׁים צִפְעֹנִים, *nachashim tjephonim*] proof against the arts of charming—*whispering*; and they shall *bite*—bite off—devour you, piece-meal. This implies the action of a large creature.

ISAIAH xi. 14.

It

It is proper to enquire, whether these words *tjepho*, *tjeponi*, and *tjephoui*, notwithstanding the differences of their spelling, are the same word, or different words? It would much ease their natural history if they described different creatures: Otherwise, we must unite the characters of a large and poisonous reptile, which is oviparous, and beyond enchantment.

I must further take the liberty of *querying*, at least, whether we are confined to Syria and to Egypt, in our investigation of this serpent? As Abraham, the father of the Hebrew nation, came from the confines of the original India—may not the knowledge of certain formidable Eastern reptiles have obtained among his posterity, and have been preserved by them? And further still: may not this passage of the prophet, be a descriptive allusion to the original Paradise, (time past) as well as a description of happy times expected? (time future). If so, possibly some traditionary memorial of this serpent is still extant, though much further east than Judea. These ideas connected seem to meet in the deadly *Naja*, or *Cobra di capello*, of the Portuguese. That this serpent contains the most fatal poison is well known—I cannot discover *certainly* whether the female be *oviparous* or not; but the evidence for that fact is presumptive: all serpent sissue from an egg; and the difference between the oviparous and the viviparous is, that in the former, the eggs are laid before the *fetus* is mature; in the latter, the *fetus* bursts the egg, while yet in the womb of its mother.

RAY says, all serpents, even those distinguished as *viviparous*, ought to be regarded as *oviparous*, though of a different class from those which produce eggs to be hatched by adventitious warmth. SEGER mentions, his assisting a serpent to lay her eggs. BARTHOLIN dissected serpents' eggs; which, he says, are only hatched in the open air, and fail in a place too close, or too hot. If the eggs of serpents are broken, the little serpent is found rolled up in a spiral form. It appears motionless during some time; but, if the term of its exclusion be near, it opens its jaws, inhales at several respirations the air of the atmosphere, its lungs fill, it stretches itself, and, moved by this impetus, it begins to crawl.

The eggs of the Ringed Snake have given occasion to a fable, which says, that cocks can lay eggs; but that these eggs always produce serpents: that the cock does not hatch them, but the warmth of their situation answers the purposes of incubation. The eggs of this serpent are the size of those of a pigeon; she lays eighteen or twenty. The eggs of the great *Boa* are but two or three inches in their longest diameter. As an instance, that the eggs of poisonous serpents do not always burst in the womb of their parent, we may mention the *Cerastes*, of which we have an account of its laying in sand four or five eggs, the size of those of a pigeon. Count DE LA CEFEDE supposes, some of this kind may be *oviparous*, others *viviparous*; but he wishes for further information.

What appears to be credible, and has been affirmed by one who says, he was a spectator of the fact, in the instance of the *Cerastes*, may, by parity of reason, be admitted of the *Naja*; and as we have seen how nearly the eggs of one serpent

pent resemble those of birds, we need not be surprised that those of another are spoken of by the prophet, as capable of being mistaken for wholesome viands, and of being (unwarily) used as food:—such, says the prophet, would prove poisonous; while such as are crushed would produce a serpent. And so LABAT tells us, that he crushed some of the eggs of a large female serpent, and found several young in each egg; which were no sooner freed from the shell, than they coiled themselves into attitudes of attack, and were ready to spring on whatever came in their way: such is nature in these reptiles!

NATURAL HISTORY OF THE NAJA.

THE beauty of colours has been granted to this serpent, which is one of the most venomous of the Oriental countries. The sight of him is far from inspiring fear in those who view him, and who know not the activity of his poison; he is beheld with pleasure and admiration, and while the glitter of his scales, and the splendour which enlivens his colours, attract notice, the singular conformation of his figure fixes attention. On the neck of this serpent is a bending line, which resembles the form of a pair of spectacles; and this has been an occasion of giving to the *Naja* the name of the “Spectacle serpent.”

The *Naja* is of a yellow colour, more or less reddish or ash-coloured, according to the age and strength of the individual, and to the season of the year. Above the swelling part of the neck is a broad band of deepish brown. The beautiful yellow which shines on the back of this *Naja*, is lighter under the belly, where it becomes whitish, sometimes slightly tinged with red. The lines which form the spectacles on its neck are whitish, but are bordered on each side with a deep colour. The eyes are lively and full of fire; the scales are oval, flat, and very long, attached to the skin only by part of their circumference; and on the upper part of the neck they do not touch each other, but leave the skin bare. It seems, that this serpent can very sensibly erect his scales. The skin, where it appears, is less shining than the scales; which being large and flat strongly reflect the light, and often appear like so many reflecting *facets*, disposed in an orderly manner, and glittering with the most resplendent gold; especially when enlightened by the rays of the sun.

The swelling of the neck in this creature, is formed by an elongation of the ribs at this part: but, beside this, the *Naja* can further swell and augment at his pleasure a loose kind of membrane, which covers these long ribs, and which KEMPFER compares to a kind of wings. More especially when he is irritated, he expands this membrane to its full extent, and then raises himself up, carrying his head horizontally, so that this membrane forms as it were a kind of *hood* behind his head, from whence he has been called the “Hooded serpent;” and some, fancying this hood had the resemblance of a *crown*, have called him the “Crowned serpent.” The female has not the spectacles on the neck, but she has the expansible membrane; she glitters with the same golden colours,
and

and has also been called the "Crowned serpent." The mistakes of naturalists have sometimes made her a different species.

The *Naja* is ordinarily three or four feet in length; but some are seven or eight feet. The *Naja* is ferocious; unless immediate antidotes be administered, his bite is fatal; the party bit expires in convulsions, and a GANGRENE spreads around the place wounded, which it is hardly possible to heal: in short, of all serpents this is most dreaded by the Indians, who go bare-footed.

When this terrible reptile means to spring on any person, he raises himself up with boldness, his eyes sparkle with tremendous brightness, he expands his membranous hood in token of his rage, opens his mouth, and darts forward with rapidity, shewing at the same time the points of his venomous fangs.

But, notwithstanding his fatal weapons, the Indian mountebanks have acquired the skill of rendering these serpents an entertaining spectacle; the like is now done by the jugglers of Egypt, and was formerly practised by those of other countries also; the *psylli* of Cyrene, the *ophiogenæ* of Cyprus, handle without fear, and tease with impunity, large serpents (even venomous, perhaps,) by seizing them strongly near the neck, thereby avoiding their bite, and then not merely controuling, but absolutely devouring them.

Those who carry the *Naja* about as a show, pretend to be preserved from his sting by the power of a root which they carry with them; but KEMPFER reports a method of much greater security, which consists in depriving this reptile of his venom every day or two, by making him bite pieces of stuff, or other soft matter, which imbibe the poison from his fangs, and, by clearing them, deprives them of their malignity. They then keep him from food, especially from moist food, till after he has played those tricks, which his masters command him. It must be added, that other Indians, to deprive this and other serpents of the power to bite fatally, break out their fangs from their mouth; by which operation, if the bags of venom which lie in the roof of the mouth continue to secrete their accustomed fluid, they have no teeth for making wounds, nor channel for conveying poison into such wounds, if they could make them.

The dances of the *Naja* are produced by the art of his master, who, taking the reptile out of his cage or basket, irritates him, by presenting a stick, or perhaps his fist; the serpent instantly rises on his tail, spreads his hood, briskly shakes himself, and prepares to attack this enemy of his peace. His master, singing all the while, moves his fist, first to one side, then to the other, which being followed by corresponding motions of the serpent, gives him the air of what is called dancing; and this exercise continues, till his master, perceiving the reptile becomes truly enraged, withdraws his hand, ceases to sing, and the fatigued *Naja* lays himself down in his box, coiled up for repose. Or, sometimes the *Naja* will only continue these motions for a certain time; of which the juggler being aware, he contrives to conclude the dance before that time is expired. The usual time is five or six minutes. The manner of educating the *Naja* for this exercise, is, by oversetting the vase which contains him, and when he

he is about to escape, catching him with a stick; irritated by this, he turns about, and would dart on his keeper; but his keeper being aware, dextrously presents his vase to receive this attack, against which the creature bruises his nostrils; this repeated makes him cautious, and this caution being strengthened by habit, he retains the same fear when a stick or the fist is presented to him, toward which he always turns his eyes, but fears to strike it.

The *Naja* has been the object of veneration in the most beautiful countries of the East; particularly on the coast of Malabar. The dread of his envenomed fangs, the desire of keeping him at a distance from habitations and families, perhaps formerly prompted people to carry provisions for these reptiles to their holes, that they might have no inducement to visit houses, &c. in search of food. The same dread probably occasioned the placing of their images (as symbols) in temples; together with that intreaty and solicitation of them to depart without doing mischief, which is customary in the East, whenever they happen to enter a dwelling. Far from defending themselves against such intruders, far from thinking of destroying them, the Malabarians send for a Bramin, and engage him to beg the favour of their guest to depart; in which undertaking they spare neither exhortations, intreaties, nor prostrations.

It now becomes our duty to compare this history of the *Naja*, with the Scripture accounts of that serpent which our translators render "Cockatrice;" and this we must attempt under the idea that *tjepho*, *tjephoni*, and *tjephouni*, are the same word. *Tjepho* is usually taken to signify, "*the darter*; a serpent which darts itself; but this is so common to serpents, that it distinguishes no one. BOCHART derives it from *hissing*, and it is called in Latin *sibilus*, "*the hisser*;" but this also is so common to serpents, that it distinguishes no one. I am well aware of the strong difference between the words *tjepho* and *tjepheh* in the Hebrew; yet, I cannot help wishing we might refer these *tjephoni* to a root (*tjepheh*), which signifies to *spread over*, or a *covering*, which would well describe the *hood* of this serpent; and farther, in its other forms this root implies to *survey*, to *look around*, to *watch round about*, which is precisely the action of the *Naja* when he raises himself to strike, and when he watches the motions of the fist presented to him while dancing.

There is another thing to be observed: the prophet says, that out of the egg of the *tjephouni* breaketh forth a viper, ΑΦΟΕΗ. It would be the strangest thing imaginable, and utterly repugnant to nature and fact that an egg of one kind of serpent should produce another kind of serpent: no such instance can occur, any more than an egg of one kind of bird, can produce a young bird of a kind different from its parent.

The word *aphoeh* belongs to the root *phoeh*, the A being prefixed; and the EH also, though radical is omissible, says PARKHURST, which leaves PHO, strictly taken, as the apparent root. This word seems to be varied, in one instance into ΑΦΟ, by the prefix Α, in another instance into ΤΙΕΡΗ, by prefixing ΤΙ. We are led to the import of the root *phoeh* by the Arabic root *phoih*, to *swell* with.

with blowing or puffing; to blow with the mouth puffed out—can a more apt description be given of the action of the *Naja* on its hood? which it puffs up, dilates, swells; and this swelling seems, from the passages usually adduced, to be the true meaning of the word, rather than puffing;—unless we take that word in rather a vulgar sense, puffing up, as a bladder with wind. Vide Isaiah xli. 24. comp. Job xi. 20. It would, then, make a very good sense, if we understand the prophet as saying, that “out of an egg of the greatly swelling serpent shall come forth a young one, swelling like its parent.”—Otherwise, we may refer (as is usually done) this *aphoch* to the viper tribe in general; or to those of poisonous fangs: *i. e.* meaning—from the egg of the *Naja*, one of the most poisonous of the viper tribe, shall come forth a young viper, poisonous also.”

Against this it may be urged that the true viper does not lay eggs; so that *aphoch* must be taken to mean the viper, or poisonous tribe, generally, of which some *do* lay eggs; or, restrictedly, such of these poisonous reptiles as are *oviparous*—which may be the character of the *Naja*, though at present undetermined by us yet; I have spoken with a gentleman from India, who, though he could not affirm it from actual observation, had always believed it.

Having hinted at the probability that the prophet uses the word *tjepthoni* as a dual implying a pair, or male and female, it is proper to observe that VAILLANT in his Travels in Africa, reports his meeting with a pair of them, of which he shot one, the other escaped. Moreover, if the *kooper capel* of the Dutch Africans be the *Cobra di capello*, of the Portuguese in India; *i. e.* the *Naja*, then that author furnishes another instance of their going in couples, in Vol. I. p. 208. of his first Travels; where he describes a pair of these serpents creeping under the legs of his hostess in her own house—“their rage, says he was kindled, their eyes became inflamed, and raising their necks, and hissing in a most furious manner, they attempted to dart upon us.” “The *kooper capel* is observable at a distance, in consequence of its size and vivid colours.” Vol. II. p. 382.

The glittering brilliancy of this serpent is perfectly agreeable to what we have supposed might be the meaning of the word *meauruth*, (literally, flashes of light—resplendencies) used by the prophet; and we find the shewy appearance of the *Naja*, which is very likely to attract the notice of an infant, remarked in strong language by travellers. Vide EXPOS. INDEX, *in loc.*

The greatest difficulty, at first sight, against accepting the *Naja* as the *tjepthon* is, that it is said, that serpent shall not be tamed, but shall resist enchantment, whereas the *Naja* is in some sort domesticated. Observe, 1. That though the *Naja* be managed by contrivance and art, yet it is not tamed, but would as readily bite its master as any other. 2. That we may understand the prophet to mean, “Though this kind of serpent be occasionally subdued, yet those I send shall be proof against such management; more venomous, more ferocious: of the same species, but of more intense powers and malignity.” 3. The word *luchash* rendered *inchantment*, signifies “whispering:” had a more powerful word been used, this particular would have been proportionally difficult; but,
in

in truth, *whispering*, as it concerns enchantment, does not appear to be the summit of *art*, or to possess prodigious efficacy. However, I think the second observation may be the nearest to the proper sense; and this, if admitted, relieves what we have proposed from its greatest impediment.

This subject may give rise to some further inquiries: 1. It appears in FRAGMENT, No. cccclv. that the *Naja* is the serpent represented as biting the Indian deity *Chrishna* by the heel—(which, as hinted above, is an occurrence but too credible where the inhabitants walk bare-footed) yet, over which *Chrishna* ultimately triumphs. Conjecture has referred this metaphorical combat and victory, to a tradition of the first great promise made to mankind: in Paradise. [Placed between *Kedem* and *India*; according to the *Puranas*.]

2. But, more expressly to this subject. FRAGMENT, No. cclxxix. contains an allusion to an Indian allegory, perfectly analogous to that of the prophet Isaiah.—I beg leave to repeat a part of it.

“To make myself understood—observe, 1st. That the Indian deity *Chrishna* is represented in plate iii. of Mr. MAURICE’S History of Indostan, as playing on a flute, whose magic melody unites in one peaceful group, a young ox, a prodigious tyger, and that mortal serpent the *Cobra di capello* (which will furnish us an ample subject at some distant opportunity.) These all listen to the tranquillizing notes of his instrument; the serpent raises himself up, but forgets his venom; the tyger looks earnestly to the placid God, in silent admiration, and growls no enmity against his companions; and the young steer, feels no alarm at his naturally blood-thirsty associate. I infer, that a power is denoted in this instance, whose influence is capable of harmonizing all nature: of which this is a *pictorial* representation.”

A further allusion is there also made to *Virgil’s* famous fourth eclogue; observing, that the *poetry* of that eclogue may be *Virgil’s*, but that the *expectations* are probably *Oriental*. This conjecture is supported by remarking a singular *insertion* (not to call it a *slip*) which, perhaps, unawares to the poet, betrays this remote origin:

OCCIDET ET SERPENS, et fallax herba veneni
Occidet; ASSYRIUM vulgo nascetur AMOMUM.

It is well known that *Syria*, *Assyria*, *Seriad*, &c. are taken very uncertainly among antient writers; but the Eastern part of the Persian empire, the *Kedem* of Scripture, seems to be not seldom meant by these names [Vide on the Map of PARADISE, Gen. iii. plate.] This places the *empoisoned herb* in Assyria (*Kedem*) also, together with the serpent, which the nascent deity, the *nova progenies*, is to slay. That this idea may not appear singular, I quote HEYNE’S note: “*Amomum* fruticis genus *Indici*—quod tamen quale fuerit parum constat. Plinii et Dioscoridis ap. Martin. et Salmas. ad Solin. p. 284. qui *amomum* fere de omni aromate sincero dictum docet.” “*Assyrium* vero, cum Armeniæ et Mediæ ea planta esset.” On the whole I infer, that we risk little in considering the *Naja* of the Indians, the *tjephon* of the prophet, and the “fatal serpent”

serpent" of the Latin poet, as natives of the same country; and, in all probability, the same reptile.

3. I cannot find any *winged* serpent in natural history; therefore, would observe, that KEMPFFER has compared the *hood* of the *Naja* to wings: might the "winged serpents" of our public version originate in a similar comparison? Some have called him the "Crowned serpent;" has this been the foundation of the *reguli*, or "king serpents" of antiquity? If so, it almost fixes the creature meant by *tjephon*, for this has been frequently translated *regulus*.

It is time to close this discussion: the reader will scarcely believe the labour it has cost. It is possible, even now, that some minor particular may have escaped us, notwithstanding our diligent endeavours to the contrary. If it should prove so, and if that should be competent to decide the question,—which among the serpent tribe is the dreadful *Cockatrice* of our version?—we shall be glad to see its application, and to congratulate that learning and skill by which it may be discovered and directed.

The NAJA, COBRA DI CAPELLO:—COCKATRICE?





THE PORCUPINE, OR HEDGE-HOG.

ISAIAH xiv. 23.

I will make Babylon a possession for the BITTERN, and pools of water.

THE word *kephod*, rendered *Bittern*, has been a great difficulty to commentators: "three elements," says SCHEUZER, "may dispute its property, earth, air, and water." The weight of interpreters is in favour of the *Hedge-hog*, or the *Porcupine*, which may stand at the head of the hedge-hog class. A long list of names might be inserted, including the lxx. and *Jerom*. Mr. PARKHURST has taken unusual pains on this subject; and it must be acknowledged, that the Arabic, *kenfud*, *kunphud*, *canfed*, &c. are not unlike the Hebrew *kephod*. I do not think it to be the common Hedge-hog, because the manners of that creature do not agree with those necessary in the *kephod*: for the Hedge-hog, is resident in more verdant and cultivated places, than we are led to place the *kephod* in.

It appears, however, from Dr. RUSSELL's *Aleppo*, Vol. II. p. 159, that the Porcupine is called *kunfud*: "It is sometimes, though rarely, brought to town by the peasants." "The notion of his darting his quills still prevails in Syria. I never met with any person who had seen it; but it stands recorded in books, and the fact is not doubted." "The Hedge-hog is regarded by the natives as

Edit. 2.

ISAIAH xiv. 23.

the

the same species, is found in the fields in abundance, but serves only for medicinal purposes.* I conclude, from these hints, that the Porcupine is *wilder* than the Hedge-hog, in Syria. The same inference arises from comparing the accounts of these animals given by BUFFON; Hedge-hogs he placed in his garden; and I have known Hedge-hogs kept in kitchens as devourers of black beetles, in order to rid the place of those too numerous insects: the Hedge-hog also abounds most in temperate climates; the north is too cold for it. The Porcupine is native of the hottest climates of Africa and India, perhaps is originally of the east, yet can live and multiply in less sultry situations, such as Persia, Spain, and Italy. *Agricola* says, the species has been in late ages transported into Europe. It is now found in Spain, and in the Appenine Mountains, near Rome. *Pliny*, and the naturalists, say, that the Porcupine, like the bear, hides itself in winter. It eats crumb of bread, cheese, fruits, and when at liberty, roots, and wild grain; in a garden it makes great havock, and eats pulse with greediness; it becomes fat toward the close of summer, and its flesh is not bad eating.

We should now enquire with what associates Scripture has placed the *kephod*? It is here connected with "pools of water," according to our translation. This we shall consider hereafter. In chap. xxxiv. 11. it is associated with *kaat*, the Pelican; with *ianshuph*, which, on Lev. xi. 17. we supposed was the lesser *Bittern*, or *Ardea Ibis*; and with *oreb*, or the Raven kind; together with thorns, nettles, and brambles; with *tannim* and Ostriches. If only water birds had been connected with it here, we should have been led to conclude that it denoted a water bird, also: but, as ravens and Ostriches, to say nothing on the thorns and nettles, are found in *dry places*, nothing hinders this from being an animal of dry places, also. In Zephaniah ii. 14. the *kephod* is coupled only with the *kaat* or pelican; but, though the pelican be a water bird, yet she builds her nest in open places distant from water; and the prophet had said, in the former verse, "Nineveh shall be dry like a wilderness;" so that creatures inhabiting dry places, may readily be supposed to reside there. This association, therefore, is not conclusive for a water bird; though we must own it looks rather like a bird of some kind as a fellow to the pelican, with which it is matched.

It appears, then, that both Babylon and Nineveh are threatened with desolation, and with becoming the residence of the *kephod*. To ascertain, if it might be done, this *kephod*, I have taken some pains to discover what creatures breed in ruins in these countries, and should be glad to know more precisely, what actually breed in the ruins of these ancient cities themselves. It is not easy to obtain any thing satisfactory. Storks, owls, bats, and a bird, which possibly is the locust bird, vide Exod. xvi. p. 46. are all I find identified. Bats, it should seem, might naturally be expected in vaults and caverns; but whether Porcupines, also, is not so clear. The following extracts are submitted

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mitted to the reader. If they do not answer our desires, they may give hints for further enquiries:

At *Chytor*—"The ruins of above an hundred [temples] to this day remain of stone, white, and well polished, albeit now inhabited by storks, owls, bats, and like birds."—*G. Herbert's Travels*, p. 95.

—"Here in ancient times stood the famous city of *Nineveh*, which, having repented on the preaching of *Jonah*, forty years afterwards relapsed into its former disorders; wherefore the people of the country say, that God overturned the city and its inhabitants, who were buried in the ruins with their heads down, and their feet upwards. There is nothing now to be seen but some hillocks which (they say) are its foundations, the houses being underneath. These reach a good way below the city of *Mosul*." *Thevenot*, Part II. p. 51.

"*Nineveh* was built on the left shoar of the *Tigris*, upon *Assyria* side, being now only a heap of rubbish, extending almost a league along the river. There are abundance of vaults and caverns uninhabited; nor could a man well conjecture, whether they were the ancient habitations of the people, or whether any houses were built upon them in former times; for most of the houses in *Turkie* are like cellars, or else but one storie high."—*Tavernier*, Book II. p. 72.

The latest account of the ruins of *Babylon* which I am acquainted with, is that by M. BEAUCHAMP in the *European Magazine*, May 1792, wherein we remark, that "this place, and the Mount of Babel, are commonly called by the Arabs *Mak Coube*, that is "*topsy-turvy*:" (which is almost the same as *Thevenot* mentions respecting *Nineveh* and its inhabitants; and which, could we trace it to its origin, very probably would be found deserving our notice.) "The master mason led me along a valley—I found in it a subterranean canal—these ruins extend several leagues." Vaults and under-ground constructions, then, remain of ancient *Babylon*, and these may well afford shelter for bats. I understand that trees grow in parts of the space formerly occupied by *Babylon*; and, if so, they may afford shelter for porcupines. Against this interpretation of *kephod* it must be observed, that in the *Chaldee* this word denotes a *bird*—taken for the Bittern, as by our translators; and so in the *Talmud*. The root of the word signifies *to cut off*, *to terminate*, which, as applied to animals, teaches nothing; for I cannot admit with SCHEUZER, that "the beaver is what best agrees to the import of the word."

[The site of *Babylon* has been recently described by Mr. Macdonald Kinnier in his "*Geographical Memoir of the Persian Empire*," Quarto, London. 1813.—but he has made no remark on any particular wild animal found there at this time. Under ground constructions still remain; the trees which were reported to grow on parts of the site, are reduced to one or two, only, different from those common in the neighbouring country.]

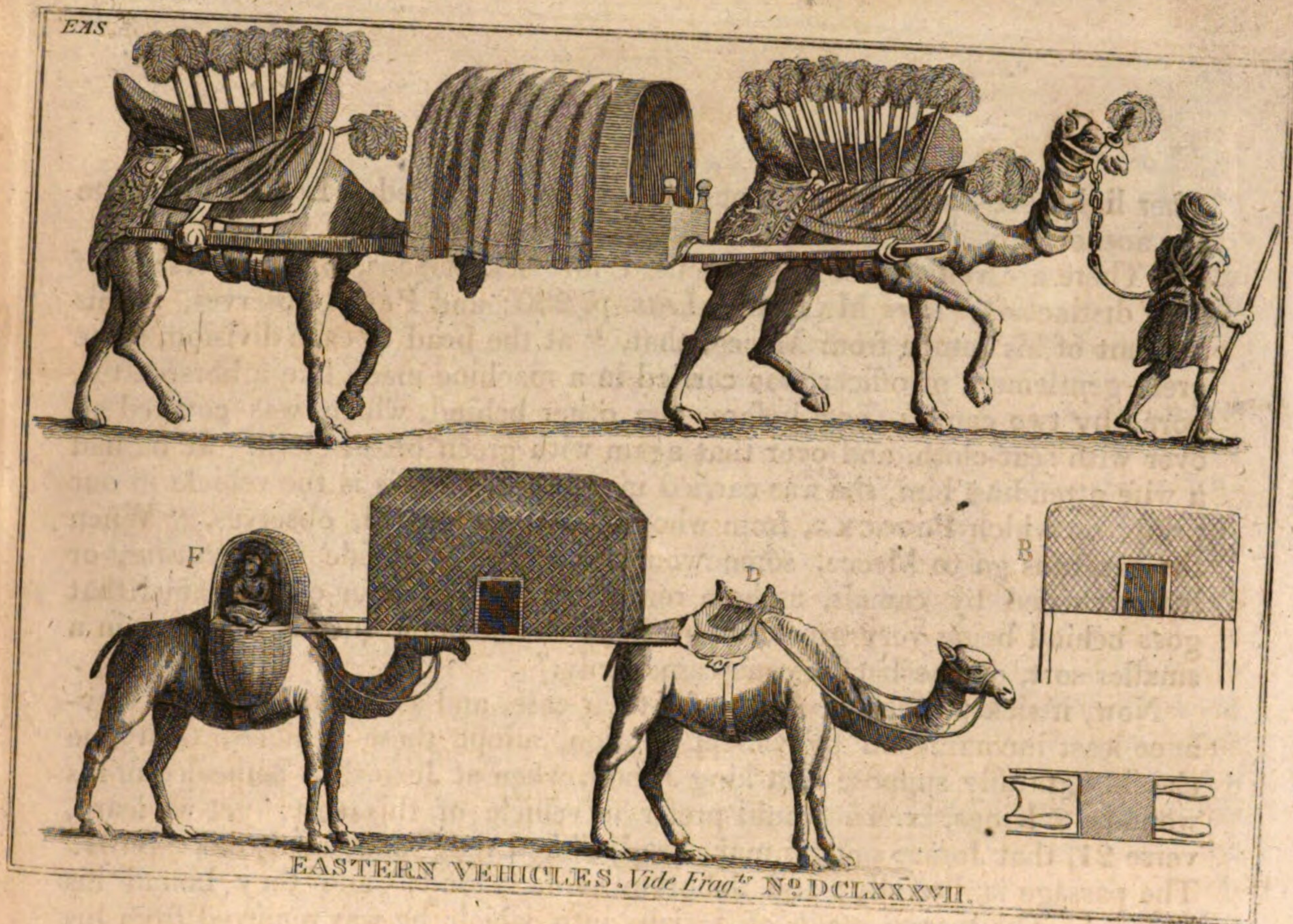
I think

I think the Porcupine does not inhabit dusty ruins, nor desert places; but rather common lands or forests, where vegetables and grain may be its food: yet, as vegetables may grow where towns have stood, perhaps this is not a decisive objection. Moreover, this objection becomes still less decisive, if the remark of *Bochart*, confirmed by *PARKHURST*, be correct, that the (now) *pools of water* are to be (hereafter) a possession for the *kephud*; and these "pools of water," are, according to the most probable notion of the word which I can form *fish-ponds*, as *Isaiah* xix. 10. They might, therefore, be understood of *garden-CANALS*, included in royal, or magnificent pleasure-grounds; supplied no doubt, originally from the river; and long after the destruction, or rather the abandoning of the city, retaining moisture enough to support vegetables, on which Porcupines might feed. In fact, Babylon became a park, wherein the kings of Parthia hunted in after ages, and the same land which supported wild boars, might equally well support other wild animals, native of hot climates, such as the Porcupine or *kephod*, appears undoubtedly to be. We have seen in the EXPOSITORY INDEX, on a former chapter, that the prophet takes some pains to consort creatures of the dry desert, with creatures of the watery marshes; and from the local situation of Babylon, both these classes might dwell there together.

I should be glad if the etymology of this word would assist us in determining the creature intended; but, what can "CUT OFF" denote as the name of a bird?—If any bird had no tail, or were otherwise *apparently* mutilated, this name might express that appearance; neither is this notion very happily applicable to the *Porcupine*, though it may be taken not unaptly in reference to the Hedge-hog, whose *spines* being very short, when compared with those of the Porcupine, *they* have the appearance of being *cut off*, and in some kinds, cut off closely too: The reader will give its proper weight to this remark. It may be added, that in Arabic, the word *kafad* or *kenfud*, includes three kinds: 1. *Kafad al bari*, the land Hedge-hog. 2. *Kafad al bachari*, the sea Hedge-hog, or what, we call the *sea-urchin*, [as indeed, we call the land Hedge-hog, by the name, *urchin* also] 3. *Kafad al gebeli*, the Hedge-hog of the mountains; which is, no doubt, the Porcupine. Seeing then, the *determination* of this language, in behalf of this word, can we do better than be guided by it, in this instance? Yet, with some reluctance, as this is not precisely that creature, which, on principles of arrangement, seems to answer the requisitions of *every* place in Scripture, where the word is found.

We conclude therefore, though wishing for further information, with the idea of *Bochart*:

And I will make it [Babylon] a possession for the Porcupine; which loves dry places:
Even the now well supplied and ever flowing garden-canals of water.



OF CHARIOTS IN THE EAST.

ISAIAH, CHAPTER XXI. VERSE 7.

WE have elsewhere endeavoured to prove that the term *recab* imports a chariot drawn by two horses only; while the augmented term, *marecab* imports a chariot drawn by four horses; but when we say *drawn*, we are by no means to consider all chariots as *drawn*, for it would be abundantly more descriptive of the major part of the eastern vehicles, to say they were *carried* by two, or by four horses, or camels; and this conception of them contributes essentially to a better understanding of many places of Scripture: so many, indeed, that perhaps it should usually be accepted in preference to any other.

Neither am I sure whether we ought not even to correct what we have already said on the subject of the *second* chariot of Josiah, and of Ahab, by supposing that conveyance to have been rather what we should call a *litter*; than a chariot.—Our plate furnishes the form of such an one, and the manner of conveyance by it. I am persuaded, that this vehicle was well known to the Hebrews, and would have been called by them *recab*; but in what passages of Scripture this should appear to be used, rather than any other, must be the subject of conjecture. As conjectures, therefore, simply, and in no

ISAIAH, XXI. VER. 7.

other

other light, are the following thoughts to be considered. Let us first state our authorities.

“There are vehicles in the East used for sick persons, or for persons of high distinction,” says MAILLET, Lett. p. 230; and PITTS observes, in his account of his return from Mecca, that, “at the head of each division, some great gentleman, or officer, was carried in a machine made like a horse-litter, borne by two camels, one before, the other behind, which was covered all over with sear-cloth, and over that again with green broad cloth. If he had a wife attending him, she was carried in another.” This is the vehicle in our print; on which POCOCKE, from whom fig. B. is copied, observes, “When the caravans go to Mecca, some women of condition ride in *tartavans*, or litters carried by camels, as here represented; the labour of the camel that goes behind being very great, as his head is under the litter. Some go in a smaller sort, on the back of one camel only.”

Now, if sick persons, no doubt for their ease, and as the mode of conveyance least incommoded by violent motion, adopt these vehicles, then one should naturally suppose that king Joram, when at Jezreel to be healed of his wounds, 2 Kings, ix. 15. would prefer a vehicle of this sort; yet we learn, verse 21, that Joram said, “make ready;” and they made ready his ‘*recab*.’ The passage is, literally; and Jehoram said, “bind;” and they bound his ‘*recab*.’ The second *recab* of Josiah, into which he was removed from his *marecab*, was probably of this nature, as affording the most easy carriage for a person desperately wounded; and I think we may infer, from 2 Kings, xxiii. 30. that he was carried in a *recab* (רִכְבָּה), when dead, from Megiddo to Jerusalem. This is also the very case I have supposed of Ahab, 1 Kings, xxii. 35. of whom it is remarked, that his blood ran into the bosom—hollow place—concave bottom—BED, of the *recab* in which he lay [and I submit whether this word *can* be applicable to those chariots which roll on wheels, as they have properly no bed, or concavity, at the bottom], and his blood spread all over the bottom of it, so that it was taken to the pool of Samaria to be washed.

I shall pass at once to a passage which in the general opinion greatly requires illustration; and I think it may be illustrated on principles under consideration, Isaiah, xxi. 7. “Let a watchman declare what he seeth; and he saw a chariot (*recab*) with a couple of horsemen; a chariot of asses, and a chariot of camels.” So says our translation: the original is “a *recab*, a pair of ridings, *recab* of an ass, *recab* of a camel;” meaning a pair of animals used for riding, in a general sense (literally *straddlers*: in French, *montures*), but now harnessed to this *recab*: one of these animals is an ass, the other a camel: an association altogether extraordinary!

Observe, this pair of animals is called *pareshim* (פֶּרֶשִׁים), and the Persian, &c. empire is called *paresim*. Probably, under a word so closely alike in sound, the reference of this prophesy could hardly be misunderstood by its hearers.

hearers. But why an ass and a camel? because Cyrus, to whom this allegory refers, was a Mede, by his mother Mandane, but by his father he was a Persian: whence we learn from Herodotus, that Nebuchadnezzar foretold this Sovereign under the idea of a mule, *i. e.* a mixture of parentage. This kind of vehicle, then being used by the great, by princes, &c. the prophet alludes to such an one, very unusually equipped, approaching against Babylon, and raising great expectation, &c. Consider the different heights, different paces, different dispositions, &c. &c. of an ass, and a camel: but that this refers to one person riding in it, is clear from verse 9. "Behold here cometh the *recab* of THE MAN, (רַכָּב) the *chief* man—by excellence [vide FRAGMENTS, No. cclxv. p. 168. *Sol. Song*, p. 122], conveyed by a pair of animals for riding, &c. and he said, Babylon is fallen"—Cyrus has conquered all before him. This is very different from Bishop Lowth; whose note I insert, to shew the extreme difficulty of the passage.

"And he saw a chariot with two riders; a rider on an ass, a rider on a camel.] This passage is extremely obscure, from the ambiguity of the term רַכָּב, which is used three times, and which signifies a chariot, or any other vehicle, or the rider in it; or a rider on a horse, or any other animal; or a company of chariots, or riders. The prophet may possibly mean a cavalry in two parts, with two sorts of riders; riders on asses, or mules, and riders on camels; or led on by two riders, one on an ass, and one on a camel. However, so far it is pretty clear, that Darius and Cyrus, the Medes and the Persians, are intended to be distinguished by the two riders, or the two sorts of cattle. It appears from Herodotus, 1. 80. that the baggage of Cyrus's army was carried on camels. In his engagement with Cræsus, he took off the baggage from the camels, and mounted his horsemen upon them: the enemy's horses, offended with the smell of the camels, turned back and fled.

"—a man, one of the two riders.] So the Syriac understands it; and Ephræm Syr."

The instances we have adduced, with the nature and form of the chariot, as we have understood it, agree perfectly with such circumstances as we might expect to find adverted to, and foreseen by the prophet.—Our principles will, I think, also explain another passage, which his Lordship considered as nearly desperate; for he thus speaks of it in his notes, chap. xxii. 6.

"—the Syrian.] It is not easy to say what רַכָּב אֲרָם, a *chariot of men*, can mean. It seems, by the form of the sentence, which consists of three members, the first and the third mentioning a particular people, that the second should do so likewise; thus בְּרַכָּב אֲרָם וּפָרָשִׁים, "with chariots the Syrian, and with horsemen:" the similitude of the letters ר and ר is so great, and the mistakes arising from it so frequent, that I readily adopt the correction of Houbigant, אֲרָם instead of אֲרָם, which seems to be extremely probable.

The

The conjunction ו prefixed to פֶּרָשִׁים seems necessary, in whatever way the sentence is taken; and it is confirmed by five mss. (one ancient), and three editions. Kir was a city belonging to the Medes. The Medes were subject to the Assyrians in Hezekiah's time. See 2 Kings, xvi. 9. and xvii. 6. and so perhaps might Elam (the Persians) likewise be, or auxiliaries to them."

Let us now attempt to explain this difficulty. "And Elam, *i. e.* Persia, whose inhabitants were excellent archers, even from childhood, as Herodotus informs us, took the quiver (with the bow, no doubt), and slung it over the shoulder, while they each of them rode in a *recab* of a single man (the word is not here, as before, אִישׁ AISH, but אָדָם ADAM), placed on an animal for riding," which elsewhere we shall see is a very correct description of a class of vehicles. If we accept the *vau* ו, we may read, "And Elam took the quiver in his single-man'd vehicle, *and* on his riding-animals." This acceptation of *perashim* as animals for riding, seems very applicable. So Isaiah, xxx. 1. "Woe to those who go down to Egypt for help, and stay on horses, and hope in *recab*—chariotry, because they are great, and in animals for riding (*perashim*,) cavalry, because they are strong," &c.

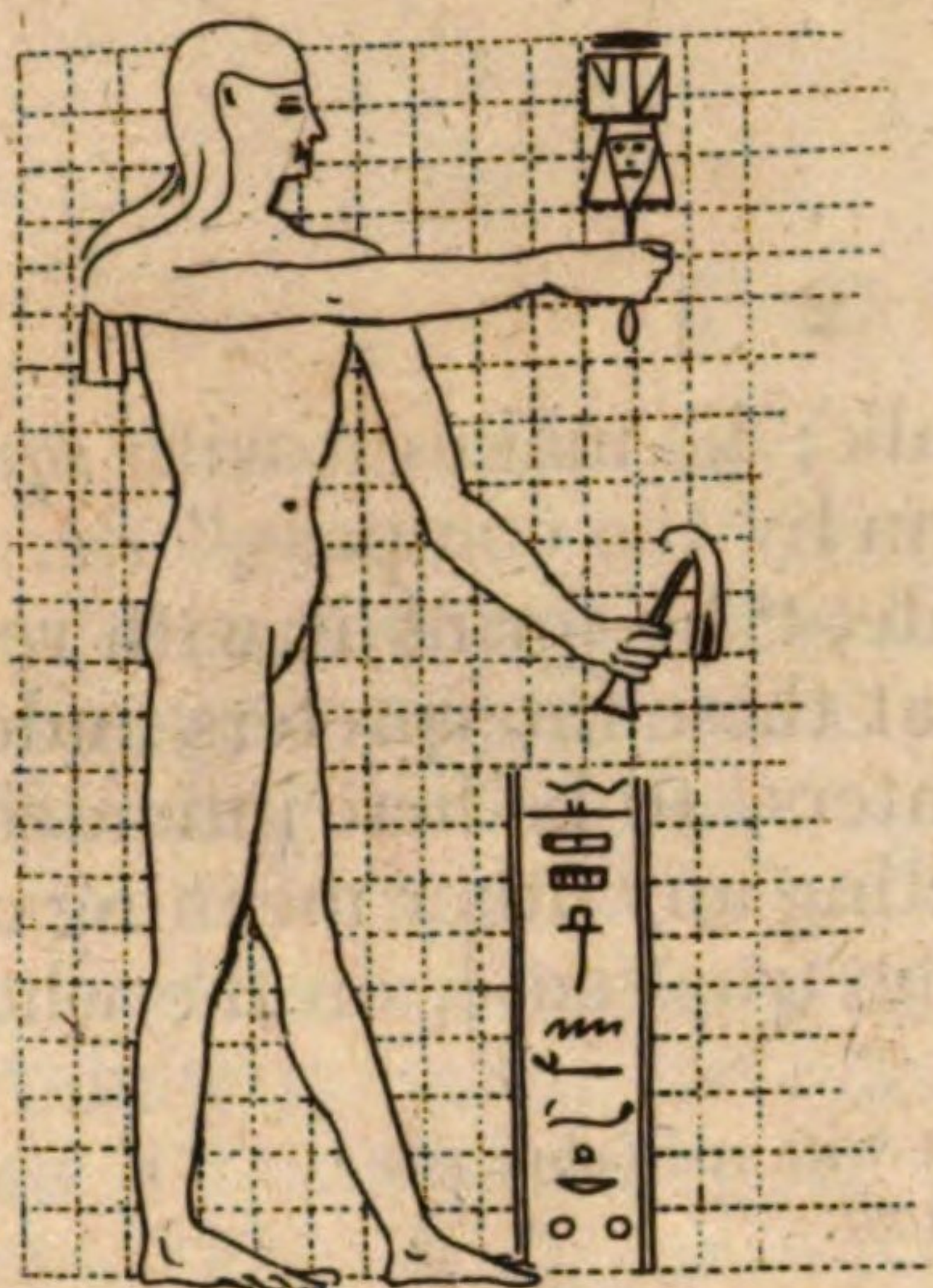
N. B. Litters are often, for the sake of state and magnificence, when used by Bashaws, &c. carried by *four* horses: though this should seem to be an appendage of authority and power. Another appendage of authority and power, is a golden ball, on the top of this carriage; by which (admitting the foregoing supposition) the *recab* seen by the prophet's watchman, would easily be distinguished, as belonging to a CHIEF man. This kind of vehicle is called in Arabic *Takht Revan*, "moving throne," and is (with such distinctions) peculiar to princes, or to others expressly privileged by the sovereign. Vide FRAZER'S *Nadir Shah; et al.*

EXPLANATION OF THE PLATE.

The upper figure on our Plate is copied from Mr. DALTON'S representations of Egyptian costume; it is the travelling equipage of the superior ranks of life, such as Bashaws, and other great men; or their wives.

The lower figure is copied from Dr. POCOCKE'S Travels in Egypt, vol. ii. p. 187. That traveller thus explains it:

"Some go in a smaller sort of carriage, on the back of one camel, as may be seen at B. People of condition ride on a saddled camel, as is represented at D. The most extraordinary way of conveyance is a sort of round basket on each side of the camel, with a cover made at top, as may be seen at F. There is a cover over the lower part, which holds all their necessaries, and the person sits cross-legged on it." [Vide the *Cur*, or travelling equipage illustrated by a plate, Genesis, xxxi. 30.]



Scale of Proportions

for the

HUMAN FIGURE.

ON THE METHOD OF PROPORTIONING IDOLATROUS
HUMAN FIGURES, USED BY ANCIENT STATUARIES.

WE have had frequent occasion to regret the ignorance of learned men on the common arts of life, but on none more strongly than on those which we denominate the Arts of Design. In FRAGMENT, No. CCXX. we complained of their mis-translation of the working tools of the Statuary; and this complaint we must here repeat. Our translators have thus rendered a very descriptive passage, Isaiah, xlv. 12. "The smith with the tongs [Margin, *axe*] both worketh in the coals, and fashioneth it with hammers, and worketh it by the strength of his arms; yea, he is hungry, and his strength faileth; he drinketh no water, and is faint."

"The carpenter stretcheth out his rule; he marketh it out with a line; he fitteth it with planes; and he marketh it out with the compass; and maketh it after the figure of a man; according to the beauty of a man, that it may remain in the house."

What can be the meaning of the phrase, "He fitteth this image with *planes*?" (between the actions of marking it out with a line, and marking it out with the compass.) Can a PLANE be employed in any part of the process of carving a human figure, in wood, or in stone? surely not. But if it could be so employed, certainly it would not be *before* the compasses had been used in proportioning it. For we ought to consider that the application of a plane, by a carpenter, is to smoothen the surface of a board, not to delineate any thing on it, but rather to erase what may be already there; whatever is rough, and rises above the superficies; and by the use of this word in the *plural*, we are led to the notion of one plane after another:—first, a coarse jack-plane, then a finer tool. We must own, however, that foreign versions have better rendered the passage, "The carpenter
opens

opens his rule, and traces it with chalk; he makes it with *squares*, [or he regulates it by the *square*;] he gives it form by the compass," &c. The lxx. render, "he regulates it by *measure*:" Vulgate, "he forms it with red chalk, he sets it by the *square*." It appears then, that these interpreters understood the instrument called a *square*, used by carpenters, to be here intended; and so SCHEUZER expressly explains it; not suspecting any other meaning of the word *square*.

Bishop LOWTH is little nearer to the true sense, on the whole, whose rendering is,

He marketh out the form of it with red-ochre,
He worketh it with the *sharp tool*.

We must now submit the words of this passage to careful examination.

1. It is certain that the Hebrew word *sered*, signifies *red chalk*, or *red-ochre*; a natural production of the earth. *Pliny* says, lib. xxxv. cap. 6. that "the *red chalk* of Egypt and Africa is most useful to workmen, as it penetrates best." This red chalk (*rubrica*) was known also to Homer, who describes the vessels employed in the Trojan war, as painted with it.

2. That (קו) *kav*, denotes a *line*, and that the Prophet says, the carpenter *stretches out* this line; which we shall suppose him to have charged with red chalk, by rubbing it well in; then fixing this line tight at each end, and *springing* it, (*striking* is the phrase among workmen,) the red chalk will delineate, or mark the place of the line from end to end, wherever it has *struck*. This action is done every day among us. Now, a number of lines thus drawn at regular intervals, *horizontally*, and crossed by others at the same intervals, *perpendicularly*, will form so many *squares*; these squares, thus obtained, will give points of intersection, and areas inclosed, which correspond with an original, squared in like manner; or, these squares may be used as a scale whereby to proportion a figure. [The process forms a regular principle, or procedure of art, and is of constant application; as appears in "THE ARTIST'S REPOSITORY."] This is the very meaning of the Prophet; literally, "he makes it IN the SQUARES," plural. For, that,

3. The word used by the Prophet denotes *squares*, appears from the renderings of the lxx. and Vulgate, though misapplied to an instrument, called a square. So, also, Exod. xxxviii. 5. "He cast *four* rings for the *four* ends"—the four corners of the square, "of the grate of brass." Exod. xxvi. 4. "The uttermost edge of a curtain;"—the corner of the square: in fact, the word signifies an *angle*;—as the *angle* of a house, which is its frequent application;—the external angle, which in most houses is square.

4. I am really unwilling to change the import of the word rendered "compasses;" to which instrument it has been very long applied; but, as the introduction of squares, and the application of them, in this instance, supersedes the use of *compasses*, and lays them aside entirely, I apprehend, we must take this word to mean an *outline*, the *contour*, the *circumference* of the figure drawn in among, and by means of, the squares. The outline of the human figure

we

we know is *curve* in its parts; and this is the genuine idea of the word: *literally*, “and in the *curve* outlines he delineates it.”

5. “And makes it according to the image of (שׂר אִישׁ) —a chief man,” a dignitary, a SOVEREIGN. See this idea confirmed on the subject of the Figures of Baal, and of the kings of the East. Amos v. 26. Plate.

If the Prophet has been thus *technical* in his description of this process, it is worth our while to understand his language, and to bring it to the test of experience. Very fortunately, among the mass of figures collected by DENON, in his lately published “Travels in Egypt,” is one which perfectly illustrates this passage; and shews, that, in Egypt, a process was practised similar to that described by Isaiah in a manner so orderly; which, we should recollect, consists in 1. filling a line with red chalk; 2. stretching it over a surface; 3. striking it, thereby 4. forming lines; crossing these lines, thereby forming 5. squares; 6. delineating the contour of the figure in these squares; and 7. forming it with dignified proportion and majesty, to represent a sovereign; in a high style, and character—a divinity fit for a niche in a temple consecrated to its service.

Neither is this all: for I understand the Prophet, as saying, “When those of the same profession are called together to admire this figure, when it is *exhibited*, and awaits their honourable suffrages, even then should the whole Academy be ashamed of their idol, even then should they, as one man, stand astonished, and blush at their folly.” The inauguration of statues, or opening them to public inspection was (as it still is in *statuary* countries) an occasion of great festivity, and gratification to the artists. Vide Nebuchadnezzar’s Golden Image, Dan. chap. iii.

Let us now attend to an actual instance, in illustration of these suggestions:

DENON’s *Explanation of* Plate cxxiv. No. I. *in his Travels in Egypt*.

“A figure, which I believe to be that of Orus or the Earth, son of Isis or Osiris. I have seen it most frequently with one or other of those divinities, or making offerings to them, always a figure younger, and of smaller proportion, than themselves. I found this on one of the columns of the portico of Tentyra: it was covered with stucco, and painted. The stucco being partly scaled off, gave me the opportunity of discovering LINES TRACED, *as if* WITH RED CHALK. Curiosity prompted me to take away the whole of the stucco, and I found the *form of the figure sketched, with corrections of the OUTLINE; a division into twenty-two parts; the separation of the thighs being in the middle of the whole height of the figure, and the head comprising rather less than a seventh part. Had the Egyptians then a model, a rule, an original canon? Had they then an art, whose principles were fixed?*—So far that artist: we may safely answer his questions in the affirmative; and may say, that to such a ‘model, rule, or canon,’ to such an ‘art whose principles were fixed,’ is the allusion of the Prophet Isaiah in the passage before us.

As the figure which we have copied from DENON, for our head-piece, explains the process to perfect satisfaction, and is an unquestionable instance, we shall close our investigation of the subject, by merely arranging the version of these stanzas.

stanzas. The whole passage is one of the most poetical effusions in Scripture; of which Bishop LOWTH says, "It far exceeds any thing that ever was written on the subject, in force of argument, energy of expression, and elegance of composition."—Yes, surely; for the Prophet was restricted by no hesitation on the score of public decorum; he exposes that vice with the whole fury of his poetical inspiration, at which Horace only sneers, lib. i. Sat. 8.

*Olim truncus eram ficulnus, inutile lignum,
Cum faber incertus, scamnum faceretne priapum,
Maluit esse Deum. Deus inde ego, furum aviumque
Maxima formido.*

.....
The Sculptors of imagery statues are all of them vanity;
Even their most highly valued (master-pieces) shall not profit them:
Rather, they themselves witness against them;
(They neither see, nor know;)
Therefore, they shall be confounded.
When one of them hath formed a Deity,
Or, when he hath cast a molten image,
Is it profitable for any thing?
Behold, all his fellow-artists shall be ashamed,
And the workmen themselves, *who labour* on the human (statue.)
They shall assemble together, even all of them,——
They shall stand—they shall fear—they shall be ashamed, as one man,
[*At the public Exhibition of this figure as a work of art.*]
The worker in iron—he sharpeneth the sacred tool;
He worketh it in the glowing coals,
And with his hammer giveth it a proper shape,
And laboureth it with the power of his arm;
Surely, too! he is hungry, and his strength faileth;
He drinketh no water, and is faint.
The worker in woods—he stretcheth out the line;
And striketh it, coloured with red chalk:
He sketcheth it (*the figure*) in among the squares,
And in its contours he *correctly* delineateth it.
Yea, he executeth it (*in a style*) according to (*the character*) of a superior man,
According to the glory (in beauty) of the human form,
That it may *dignify* a sacred station in a temple.

Such seem to be the sentiments, and such is the language, of the Prophet. Whoever is acquainted with the history of art, well knows the emulation among ancient artists; knows too, that the language of the Prophet is not only correct and technical, but strongly descriptive of what, after all, is indescribable, that spirit of exertion and rivalry, of appropriating personal-fame, national honour, and civic dignity, to which we are beholden for the productions of a Praxiteles and a Phidias; for the Venus of Cnidus, for the Hercules of Glycon, and for the Pythian Apollo: those more than mortal statues of the artist, and amateur! not of their own day only, when they were fresh from the master's hand, but of the present age also, which justly appreciates their merit as invaluable; while it pities that blindness—that depravity of heart, which led their votaries to adore them as *simulachra* of Deities, if not as Deities themselves—marble though they were!



THE HYÆNA.

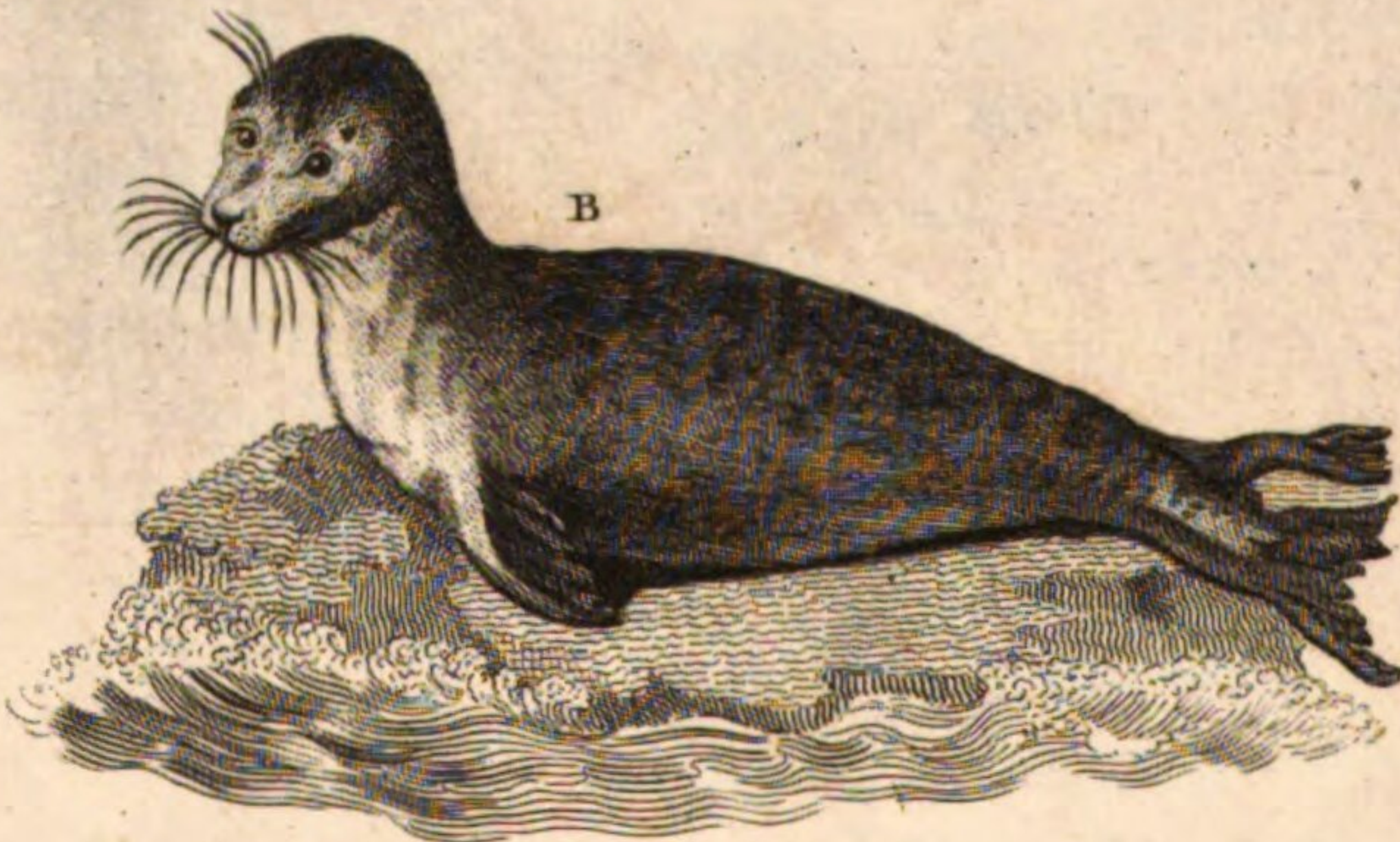
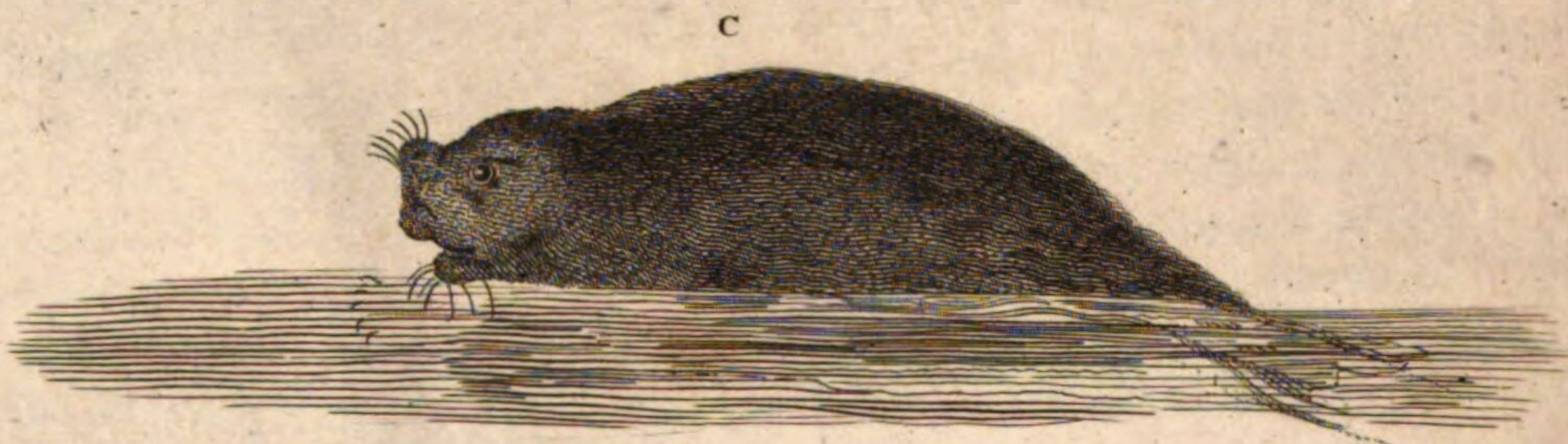
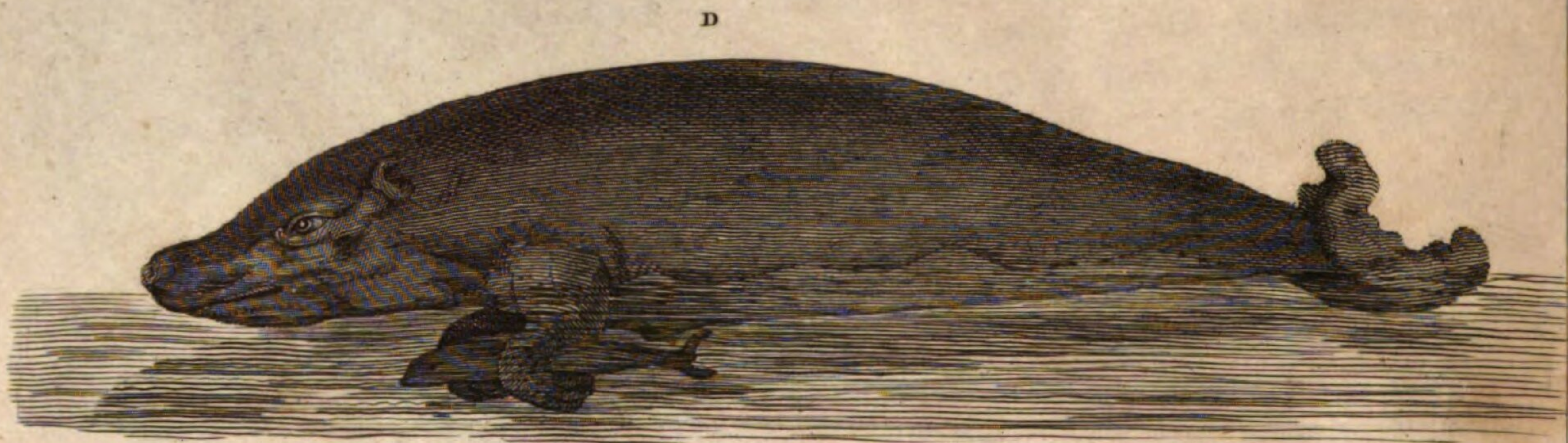
IT is rather extraordinary that a creature so well known in the East, as the Hyæna is, should be so seldom mentioned in Scripture. It is understood to be named in two places: the first is, 1 Sam. xiii. 18. "the valley of Zeboim," Aquila renders "of the *Hyænas*:" the second place is, Jer. xii. 9. where the lxx. render the "speckled bird" of our translation, by "the cave of the *Hyæna*." Bochart exerts himself to establish the *Hyæna* in this place, and Mr. Parkhurst, with great satisfaction, supports him. SCHEUZER also looks this way: they would render—"Is then my heritage to me as a fierce Hyæna? Is there a wild beast all around upon her?" Without depreciating this version, let us examine the passage. "*I have forsaken my [VERY] house, my constant abode: I have left my heritage. Why so? for what cause? My heritage was to me as a lion's lair in the marshy places of the forest; its inhabitant gave out its growl against me, thereby repelling me when I approached to visit it; insomuch that therefore I hated it. Like the OITH TJEBUO is mine heritage to me: the OITH turns himself every way round upon it, forbidding my approach at any part. Therefore, go, assemble yourselves all ye wild beasts of the field; proceed to devour it, rushing into it on all sides.*" But I could almost wish to connect the *field* with the following words; to this purpose:—"Go, in a general body, all wild beasts; proceed to devour (what should be) THE
 JEREMIAH ii. 9. fertile

fertile field;" which is the meaning of the word *shadai*, rendered "field;" and fixes the subject to be devoured. The idea seems to be that of a person, who having met with ingratitude, leaves the ungrateful to all calamities;—his field having got one wild beast in it, he relinquishes it to all wild beasts. The question is, what is this wild beast, this *oith tjebuo*?—Let us investigate the import of the words.

The word *oith* signifies "the rusher;" whether bird, beast, or man. The word *tjebuo* signifies *striped*, or *streaked*:—the "striped rusher," then, is the literal rendering of the words used. Is this *rusher* a beast or a bird? It is taken for a *bird* by our translators, and by *Jerom*, who has led the modern versions; but it is clear the LXX. took it for a beast, and that beast the *Hyæna*: but why is the heritage the *cave* of this beast? and this *cave* the LXX. seem to say, *circular* in it. Nevertheless, this agrees with the idea above suggested, of a fruitful field, into which a wild beast has entered, and where he turns himself every way, to repel the proprietor; but then, this obliges us, by parallelism, to take the lion of the former verse, for the lion's *lair*, or *den*, which is not mentioned, though it may be implied, in the original. The *Hyæna* is the animal most probable to be this *tjebuo*, at present; and as such we receive it. "It is well known at Aleppo," says RUSSELL; "lives in the hills at no great distance from town; and is held in great horror." Is the size of a large dog. Is remarkably *striped*, or *streaked*. Has much similitude to the wolf, in nature and form; but has only four toes on each foot, in which it is very nearly singular. Is extremely wild, sullen and ferocious; will sometimes attack men; rushes with great fury on flocks and cattle. Ransacks graves: devours dead bodies, &c. Is untameable.

I cannot avoid suggesting a *possibility* that that very obscure animal the *Sheeb*, may be the *TJEBUO* of this place. RUSSELL, vol. ii. p. 185. gives the following account of it: "The natives talk of another animal, named *Sheeb*, which they consider as distinct from the wolf, and reckon more ferocious. Its bite is said to be mortal; and that it occasions raving madness before death . . . is like a wolf . . . is perhaps only a mad wolf. Long intervals elapse in which nothing is heard of the *Sheeb*. In 1772, the fore-part and tail of one was brought from Spheery to Dr. Freer. It was shot near Spheery; was one of several that had followed the Bassora caravan over the Desert, from near Bassora to Aleppo. Many persons in the caravan had been bitten, all of whom died in a short time, *raving mad*. It was reported that some near Aleppo were bitten, and died in like manner; but the Doctor saw none himself. The circumference of the body and neck rather exceeded that of the wolf. Colour yellowish grey." If an animal of properties so terrible had taken its abode in any person's heritage, no wonder he should abandon it to its fate. As the creature was scarce, (never seen by Dr. RUSSELL, or his brother) may this account for the rare insertion of it, in S. S. and the ignorance of translators? Were a mad dog to get into any person's house in England, would he not quit it? This creature, coming from the Desert, agrees with "the valley of *Zeboim*, toward the wilderness," in 1 Sam. xiii. 18. No mention of *streaks*.





SEA MONSTERS. TANNIM. DRAGONS.

LAMINA

Even the sea, however,
Is not a mere mass of water.

We have had, and shall have, a
acquaintance with the sea, and its
powers, which will be a great
benefit to us. The sea is a
danger, which is not a kind of
in the present order of things, it is
green, and green sea. Sea, Philosophy
is capable of great things, and
that this is the case, is a fact
the Natural History of the sea,
I rather wish to see, and I
know the sea, and I know the
ingrains how the sea is

We observe, that the sea is
(which is known to be a fact)
in the water, and that the sea
to be near to the sea, and that
shall punish the sea, and that
sea. As the sea is a creature,
creature, is the sea

Those who are
relinquish the sea,
ch, and I
ance to the sea,
thing of the sea,
liberance of the sea,
the sea, which is a
amphibious, but always

The LXX reader, and the
but neither dragons,
young. The LXX, and
the LXX, and the
we may perceive, the
flexible to the sea, and

But, what is the sea,
a creature of the sea, and
EDIT. 1. LAMINA

LAMENTATIONS iv, 3.

EVEN THE SEA-MONSTERS DRAW OUT THE BREAST;
THEY GIVE SUCK TO THEIR YOUNG ONES.

WE have had, and shall have again, repeated occasions of wishing for better acquaintance with the Natural History of the East; especially, in those interpreters whose public translation is the voice of authority. Among other instances we notice that of rendering *Tahash*, Numb. iv. 10. Ezek. xvi. 10. *et al.* by the *Badger*, which should rather be a kind of Seal; and that of rendering *Tannin*, תַּנִּין, in the passage under consideration, “*Sea-MONSTERS*,” which draw out the breast, and give suck. Now, Philosophy knows nothing of *monsters*; whatever is capable of posterity, producing young ones to suckle, is no *monster*. I know that this word *tannin*, is supposed by those who have endeavoured to understand the Natural History of the Bible, to denote a Whale, or the Whale kind: but, I rather wish to restrain it to the *Amphibia*, to that class of animals which haunt the shores, as well as frequent the waters. To justify this idea, let us inquire how the *tannin* are described in Scripture.

We observe, first, that *tannin* are frequently associated with the Crocodile, (which we know is completely amphibious) taking the Leviathan for that creature: as Psalm lxxiv. 13. “Thou brakest the heads of the [*tanninim*] dragons in the waters; thou brakest the heads of the *Leviathan* in pieces, and gavest him to be meat to the people inhabiting the wilderness.” Isaiah xxvii. 1. “The Lord shall punish Leviathan . . and he shall slay the [*tannin*] dragon that is in the sea.” As the *tannin* is associated with the Leviathan, that it cannot be that creature, in these passages, is clear.

Those commentators who have supposed that *tannin* means a Whale, must relinquish that opinion when considering the expressions of the prophet Malachi, i. 3. “I disliked Esau, and gave his mountains to solitude, and his inheritance to the *tanuth* [dragons, Eng. Tr.] of the wilderness.” Now, to say nothing of the scarcity of whales in the Red Sea, where only they could visit the inheritance of Edom, if by bare possibility they could approach it from thence; how can whales come on shore to possess these inheritances, since whales are not *amphibious*, but always remain in the deep?

The LXX. render this word, Lam. iv. 3. by *dragons*; the Vulgate by *lamia*; but neither dragons, *i. e.* serpents, nor *lamia*, have breasts, or suckle their young. The LXX. read sometimes *ἐχίνοι*, *hedge-hogs*, and elsewhere *Sirenes*; the Vulgate also reads “*Sirens* in the houses of pleasure,” Isaiah xiii. 22. so that we may perceive, this word *tannin* (and its relatives) has been a source of perplexity to translators, as well ancient as modern.

But, what are the characteristics of the *Tannin* in Scripture? 1. It is evidently a creature of the amphibious kind; as appears from passages already adduced.

EDIT. 2.

LAMENTATIONS iv. 3.

2. It

2. It suckles its young; and *draws out* the breast: 3. It is capable of exerting its voice very mournfully, as appears, Micah i. 8. "I will make a *wailing* like the "dragons" [*tannim*]*—when do dragons, i. e. serpents, wail?—when do they mourn and lament?* 4. It is capable of holding its breath a while—of drawing in vehemently a quantity of breath, and, consequently of emitting it with violence—of *panting*, as Jer. xiv. 6. "The wild asses stand on the high-places: they puff for breath, (or puff out breath) like *tannim* [dragons] their eyes fail because there is no grass." By these properties we may discover the *Tannim*.

I propose to submit to the reader rather a class of animals than any distinct species or individual, because it is not altogether certain how many of those facts which are known to us, were known in Syria; nor what kinds, of the same class of creatures, were most likely to furnish subjects of comparison to the writers in Judea, &c. Beside which, I presume, we must make allowances for the different countries to which these *tannin* are referred; as to Egypt, to Babylon, &c. the respective species of which might differ from each other, perhaps, considerably.

I shall consider the Seal, and its relatives, as answering in many particulars to the *Tannin*; as already noted.

THE SEAL, FIG. A. on the Plate.

The vulgar name is Sea-Calf; and on that account the male is called the bull, the female the cow. The Latin name is *Phoca*: Dr. Charlton derives this word *φωκη* from *βωκη*, *boatu*, denoting a hoarse voice—a lowing—which it makes. *An. Pisc.* p. 48. The lodgments of the Seal are hollow caves in rocks, or caverns near the sea, out of the reach of the tide: in summer they come out of the water, to bask, or sleep, in the sun, on the top of large stones, or shivers of rocks, and that is the opportunity taken to shoot them: if they chance to escape, they hasten toward their proper element, the sea, flinging dirt and stones behind them, as they scramble along; at the same time *expressing their fears by PITEOUS MOANS*: but if they happen to be overtaken, they make a vigorous defence with their feet, and teeth, till they are killed.

The flesh of these animals formerly found a place at the table of the great; as appears from the bill of fare of that vast feast which Archbishop Nevill gave, in the reign of Edward IV. Vide *Leland's Collectanea*.

Some are as large as a cow; from that downwards to a small calf. They feed on fish; are very swift in their proper depth of water, and dive like a shot. The Seal brings her young about the beginning of autumn. Our fishermen have seen two SUCKING THEIR DAM AT THE SAME TIME, AS SHE STOOD IN THE SEA in a perpendicular position. The young are at first white, and woolly. Seals swim with their heads above water: *cannot continue long under water*; ARE THEREFORE VERY FREQUENTLY OBLIGED TO RISE TO TAKE BREATH; and often float on the waves.

They

They swim with vast strength and swiftness; frolic greatly in their element, and will sport without fear about ships and boats; on a ship's approaching the isle of *Lobos*, near the river *Plata*, it is met by shoals of Seals, which will hang by their fore feet to the sides of a vessel, staring at the crew; then drop off, and pass and repass the vessel for a considerable time. (*Muratori, Hist. Paraguay*, 229); which may have given rise to the fable of *sea-nymphs* and *SIRENS*.

Their docility is very great, and their nature gentle; there is an instance of one which was so far tamed as to answer to the call of its keeper, crawl out of its tub at command, stretch at full length, and return into the water when directed; and extend its neck to kiss its master as often, and as long, as required. Dr. Parsons, *Phil. Trans.* Vol. XLVII. p. 113. Seals are often eaten by voyagers. Seals are found in the Caspian sea; also in the Mediterranean; eight or nine feet long, described by Aristotle, *Hist. An.* lib. ii. cap. 1.

These extracts are from Mr. PENNANT; principally from his *British Zoology*. That writer affords various other points of remark, all referring to Seals, though not to the same species: some are from his *Arctic Zoology*, also.

“The skins of the largest Seals are cut into soles for shoes. The women make their summer boots of the undressed skins; and wear them with the hair outermost, p. 157. The skins of the young are sometimes used to lie on, p. 159. Bites hard; barks, and *whines*: will weep on being surprized by the hunter. The skins of the young form the most elegant dresses for the women, p. 162. has one young, rarely two, *which it SUCKLES on fragments of ice*, far from land. The skin made into boots, is excellent for keeping out water, p. 164. They live chiefly on rocky shores, or lofty rocks in the sea, *and by their dreadful ROARING are of use in foggy weather to warn navigators*, p. 173. Some kinds live in families; each male has from eight to fifty females, whom he guards with the jealousy of an eastern monarch; a family sometimes amounts to 120, including the young. *The males are very fond of their young*; in case a young one is carried off, he melts into the deepest affliction, and shews all signs of deep concern. The female when with its young is very fierce; and *excessively fond of it*. One of Lord Anson's sailors was killed by the enraged dam of a whelp, which he had robbed her of. The males are very lethargic, fond of wallowing in miry places, lie and *grunt* like swine; but sometimes *snort like horses in full vigour*. Some are 26 feet in length; have a fierce look; the old ones *snort and roar like enraged bulls*; the females make a noise like calves; the young bleat like lambs. A female Seal that has young, sometimes instead of flying the field, *will, in the most vehement rage, fly at the Greenlander who attacks it*. So far Mr. PENNANT.

In tracing the connections of the Seal kind, with those other animals to which it is allied by manners, &c. we come to the Morse, the Walrus, and the Manati; but as it is not probable that the two first were known in Judea, I shall only offer a few hints on the MANATI; as it is likely that this creature may be more directly referred to in sacred Scripture than others, because it inhabits the Indian ocean.

THE MANATI.

It has no voice ; but *makes a noise by hard breathing like the snorting of a horse* ; brings forth its young in the water ; SUCKLES them there ; has a broad horizontal tail, without any rudiments of hind feet ; consequently it never goes ashore, or climbs rocks, &c. being incapable of walking. They frequent the edges of the shores ; live in families ; a male, a female, a half grown one, and a very small one. The females oblige the young to swim before them, while the other old ones surround, and, as it were, guard them on all sides. The affection between the male and female is very great ; for if she is attacked he will defend her to the utmost ; and if she is killed, will follow her corpse to the very shore, and swim for some days near the place where it has been landed. Some are 28 feet long ; weigh 8,000 lbs. If a female, which has a young one, is struck, she *takes it under her fins, or feet, and shews, even in extremity, the greatest affection for her offspring* ; which makes an equal return, never forsaking its captured parent.

I think we have now described a class of creatures, which may justly claim preference over the *Sea Monsters* of our translation : they are 1. *amphibious* ; 2. affectionate to their progeny ; 3. they have voices ; and 4. their breathing is like to the snorting of a horse, &c. We know, also, that they are found in the Mediterranean, consequently on the coast of Judea ; in the Red Sea, [*Vide* FRAGMENT, No. 9. H. 492,] consequently on the coast of Edom ; in the Indian ocean, consequently they might ascend the rivers (as the Tigris, &c. to Babylon, &c.) which issue therein ; and, in short, they appear, under one species or other, to be capable of fulfilling all the characters which are attributed to the *Tannin* in Scripture.

The reader will recollect that it may be difficult to determine the species : the present sketch, therefore merely attempts to establish the propriety of referring the *Tannin* to the class of *Amphibia*.

But it may be observed further, in support of our principles, 1. that the Leviathan is said to be given for meat to the people ; so these *Tannin*, *Amphibia*, are mostly eatable, and some are excellent eating ; they are therefore properly associated with him.

2. The word (שִׁמְמָה *Shememah*), rendered "in solitude," Mal. i. 3. in reference to the mountains of Edom, should, to establish the usual paralelism, be a creature of some kind.—Now the word שִׁמְמִית *Shememith* is so nearly the same, that I think it may be taken as equivalent ; and this word signifies—a *Spider*, says our translation, Prov. xxx. 26.—a *Lizard*, says Bochart, *Works*, vol. ii. p. 183. Without examining this, observe how the sentiment of the prophet stands, under this rendering. "But I disliked Esau, and placed on his elevated places, his mountains and hills, (*i. e.* they were overrun with) Spiders—or Lizards ; and his heritages, his levels, his shores, and strands, they were occupied by amphibious animals, which dwell far from man, in wastes, and deserts, insomuch

insomuch that Edom acknowledges, we are impoverished," &c. Does not this strengthen the energy and poetry of the passage?

3. As some of these *Amphibia* live wholly on grass, *i. e.* vegetables growing in or near the sea; it makes one similarity between them and wild asses.

4. It may be guessed that the *Sirens* of the LXX. and of Jerom, refer to some of the tribes of animals of which we have been speaking; and so perhaps does their *Lamia*: for these creatures so far resemble the human species, 1. as to have a kind of hands, *i. e.* not fins, but fingers, with nails on them; 2. the females have breasts, and suckle their young; 3. their union is *more humano*.

Indeed, I would not close this subject, without endeavouring to shew by what means the LXX. Vulgate, &c. were induced to adopt their renderings of *Sirens* and *Lamia*: for these are names yet given to the Manati. So we read in BARBOT'S Voyage to Congo [Churchill, Vol. v. p. 517.] of "fish by the inhabitants called *Ambisangalo*, and *Pessengoni*; by the Portugueses, *Peixe Molher*, or WOMAN-FISH; by the French SYRENE; and the English MERMAID: they have short arms, hands, long fingers, which they cannot close together, because of a skin growing between them, as in the feet of ducks and geese, [Vide FRAGMENT, No. 492.] *The females have TWO STRUTTING BREASTS*: their flesh tastes like pork. Merolla says, the river Zaro has plenty of these monstrous fishes, or MERMAIDS, *resembling a woman upwards*, but the lower parts like a fish: when hurt they are said to give *a cry like the human voice*." We have only to imagine that the same circumstances were reported in the same manner anciently, as they are at present, and we see the reason of these names being adopted by the ancient translators; who do not appear to have been absolutely misled to that extent which some not adequately informed have supposed: though certainly, it is probable, their acquaintance with the animals really meant in these passages of sacred Scripture was somewhat deficient in precision.

Though I believe what has been already said may be taken as presenting a general idea, and an idea sufficiently correct, of the class of creatures described by the word TANNIM, yet it may not be amiss to offer a few hints in addition. *First*, of the word itself: it appears under different forms; 1. TANNUTH, *feminine*, Mal. i. 3.—2. TANNIM, *masculine*, *freq.* sometimes perhaps singular, at others dual, or plural. We have also a word usually referred to the same root. 3. TANNIN, Exod. vii. 9, 10, 12. And 4. TANNININ, which I presume is the plural of the former. Exod. vii. 12. Lam. iv. 3.

I do not know that we can reduce this word, in search of its root, to still greater simplicity; but, I think if the word *Leviathan*, in which *tan* is one of the compounds, were separated into its parts, *Levi* and *than*, or *tan*, they might readily be taken to signify—*Levi*, "the jointed"—RIVETTED; and *tan* "the drawn-out—elongated—lengthened":—that is to say "the long animal with rivetted scales;" a very expressive name, and an accurate description of the Crocodile. The same, I guess, is the import of *tan* in *taneh*, used as a verb, Judges v. 11. "Instead of the noise of the archers at the places of drawing water

water, there shall they—(those who draw water)—rehearse (תַּנּוּ ITANU) *draw out*, PROLONG mutual discourse, conversation, or remarks, on the subject of the righteous acts of the Lord.—They shall be so full of their subject—that they shall extend their reciprocal communications to a great length. So Judges xi. 40. “The daughters of Israel went yearly, four days in a year, (לִתְנֹת LETANUTH) to PROLONG” i. e. conversation, kindness, visits, &c. “with the daughter of Jephthah.”

Should we transfer the preceding idea to animals, we shall find it describes a class of creatures which are of *lengthened* form: whose hinder parts, at least, are noticeably *taper*, and *drawn out*. The reader will observe, that this agrees precisely with the figures on our Plate, all of which are more or less round and full in the front of their bodies, but are *drawn out*, *slender* in their hinder parts. Even *whales*, by which our translators sometimes render *tannim*, are *drawn out*, towards the tail, though of great breadth at the head and shoulders.

These principles, if they be just, exclude the whole class of *Amphibia* which is distinguished by having short bodies; such as frogs, toads, turtles, tortoises, &c.: for though some of these may have an appendage which forms a tail, yet they can hardly be called “*lengthened-out* animals:” their shells, or bodies, being round, not oblong, or protracted, to any degree deserving notice: and I think the general usage of Scripture in reference to this word will justify the inferences which have been drawn above, from such passages as have now been the subject of our consideration.

I feel a reluctance also in admitting that *dragons*, i. e. great serpents, are described by this word; but if the *dragon* was, as I believe it really was, a notion originally derived from the Crocodile, and if it be also ancient, then the word “dragon” may be more nearly allied to the import of the word *tan*, than the usual acceptation of it should lead us to believe.

I cannot quit this subject without wishing for some decisive character, whereby to direct the application of these words to different creatures, though of the same class: does *tannin* signify precisely the same creature as *tannim* and *tannuth*? I should think not; but how to ascertain the distinction, or where to point it out, or by what marks of dissimilarity to discern them, requires further information.

We have this word *tanninim* with the epithet (גְּדוּלִים GEDULIM) *great*, annexed to it. So Gen. i. 21. “God created *great* whales,” Eng. Tr. And then, I presume, it may be much nearer to the signification of a Whale, or very large amphibious animal *using the sea*: for we ought to recollect that some *Amphibia* inhabit fresh water, as rivers, lakes, ponds, &c. while others inhabit the sea; and possibly *tannim* may be composed of *tan*, a LONG creature, and יָם IM the sea, i. e. “a long-shaped sea and land animal.” But supposing this may be admitted, will it justify the accepting of *tannin*, or *tannuth*, as *Amphibia* inhabiting fresh waters, whether ponds or streams, while *tannim* are salt water *Amphibia*?

On the whole, we may include in the class of Tannin all Lizards, from the *efft* or *water-newt*, to the *Crocodile*, provided they be amphibious, which excludes the

the *Chameleon*, &c. We include also, the Seal, the Manati, the Morse, &c. and I should include the whale kind, if they came on shore ; but, as they remain constantly in the deep, I presume to think they must be referred to the class of fishes. Moreover, whether the East might anciently have any knowledge of the whale kinds, properly so called, deserves enquiry, before it be admitted as certain.

The words before us occur frequently in Scripture, as we shall find in the EXPOSITORY INDEX : and whether any of them obliges us to consider the animal expressed by it as a serpent, may there perhaps be considered. I own some of them look very strongly that way, yet I think there are insuperable objections to it.

N. B. Perhaps the sense of *smoke*, which in the Chaldee is expressed by a word from the same root, may be derived from the idea of a vapour, &c. *lengthened—drawn out* : for so smoke appears to be, when rising from the fuel.

The following extracts from Dr. PARSON'S Dissertation on the Class of the *Phocæ Marinae*, may contribute to direct our opinion on the nature of these amphibious animals. *Phil. Trans.* Vol. XLVII. No. 15, p. 109.

“ All the species of *Phocæ*, this being the generical name, have among them a very great likeness to each other, in the shape, not only of their heads, but also of their bodies and extremities. They are webbed nearly alike, are alike reptile, viviparous, bringing forth, suckling, and supporting their young alike ; and, in fine, all have the same title to these appellations, *Phocæ*, *Vitulus Marinus*, *Sea-Cow*, *Sea-Lion*, &c.

“ The *Manati* is also a *Phoca*, and is one of those species which grows to a prodigious size. The great skin, in the Musæum, is that of a *Manati* ; which seems to me to agree with the other species of this family, in every essential part, except broad bifid webs, instead of webbed feet : and Peter Martyr gives an account of one of these, which was thirty-five feet long, and twelve thick.

“ This author describes the *Manati* very fully ; and then tells this remarkable story :

“ A governor, in the province of Nicaragua, had a young *Manati*, which was brought to him, to be put into the lake Guanaibo, which was near his house ; wherein he was kept for the space of twenty-six years ; and was usually fed with bread, and such-like fragments of victuals, as people often feed fish with in a fish-pond. He became so familiar, by being daily visited and fed by the family, that he was said to excel even the dolphins, so much celebrated by the ancients for their docility and tameness. The domestics of this governor named him *Matto* ; and at whatsoever time of the day they called him by that name, he came out of the lake, took victuals out of their hands, crawled up to the house to feed, and played with the servants and children ; and sometimes ten persons together would mount upon his back, whom he carried with great ease and safety cross the lake.”

There

“ There are some species of this genus of the *Phoca*, which never grow to above a foot long ; and there are of all sizes at full growth from these to the *Manati* and *Walrus*. The skins of every species have short hair, and their colours are variegated from the straw-colour and yellow to the deepest brown and black. They are sometimes regularly brindled, sometimes curiously spotted : sometimes in brown clouds upon a yellow ground, like that of a pied horse ; and sometimes the brown or black occupies the greater part of the skin, having less of the yellow ; and, in short, even those of the same species are as variously spotted or clouded as the hounds in the same pack ; and it is probable, that, in unfrequented islands and countries, other species of this tribe are yet undiscovered.”

EXPLANATION OF THE PLATE.

A. is a Seal from PENNANT, of the kind common on the British shores. The reader will observe the make of his feet, &c.

B. Is the Seal, or *Phoca*, from BUFFON. This kind inhabits the Mediterranean : and is described by Aristotle. It could hardly be unknown in Judea. The reader will fancy, if he pleases, that the countenance has some likeness to the human.

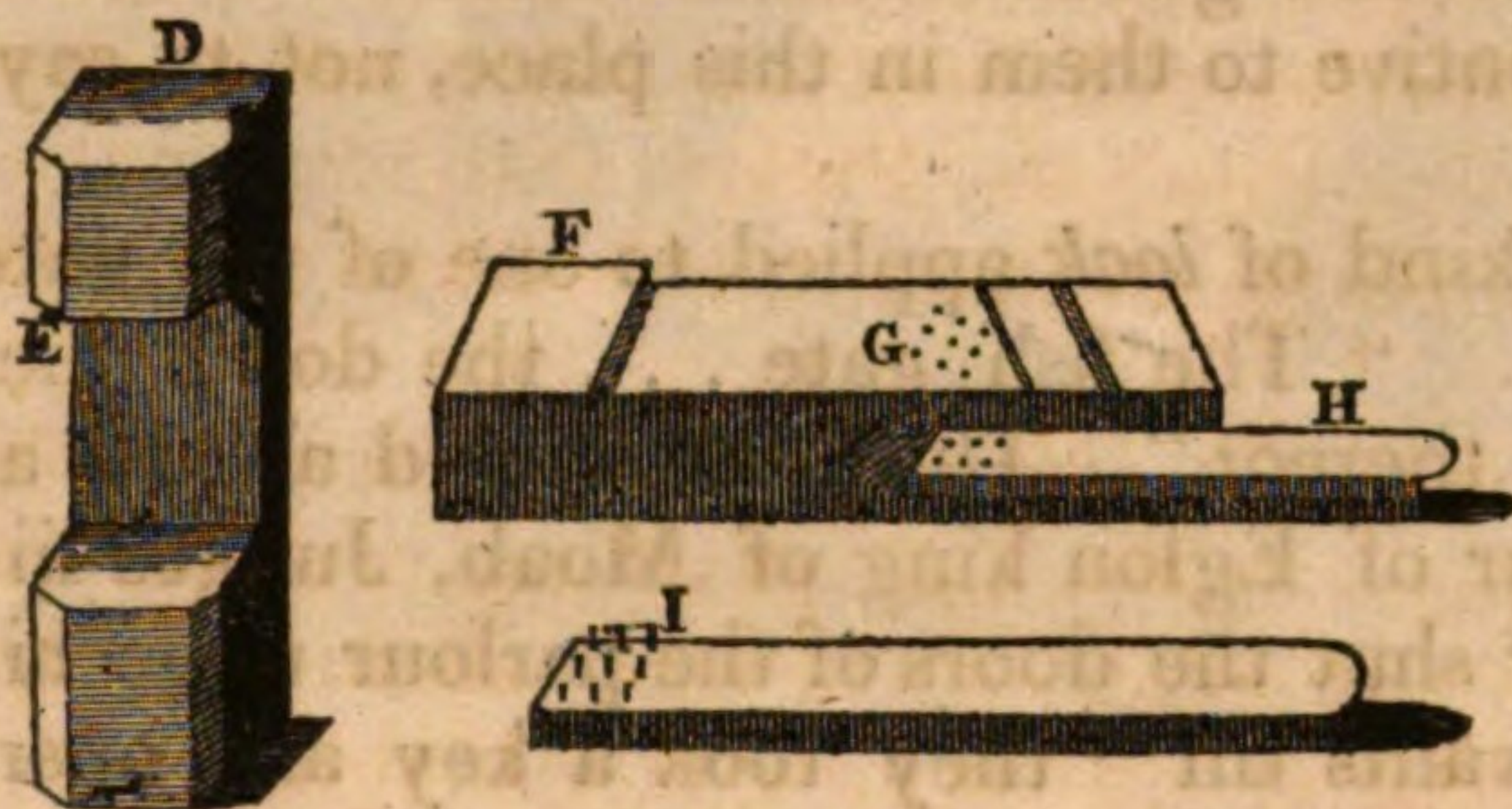
C. Is from STEDMAN'S Narrative of an Expedition to Surinam, p. 176, vol. II. The remarkable bluntness of the nose in this animal, leads to the supposition of a difference of species ; [the upper figure has a nose equally remarkable for its length]—as this figure wants the tail, I have added D. which is from BARBOT'S Voyage to Guinea, in Churchill's Voyages, Vol. V. p. 104. It is designed, no doubt, to shew the manner in which the female *Manati* carries and embraces her young when in danger. BARBOT also tells us, “ the longest *Manatis* are twenty feet long ; the skin is made into bucklers, which are musket proof ; the female has TWO BREASTS, much resembling those of the black women ; SUCKLES its young ; they feed in large herds, in many parts of the East Indies ; the flesh tastes like veal ; it feeds on grass, on the banks of rivers ; it has not a free respiration, and therefore often thrusts out its snout above water to take breath, p. 562, 563 of Churchill, Vol. V.

Upon the whole, I think we may consider the Hebrew *Tahash*, as being, decidedly, a Seal ; but *Tannin* as including a more extensive import ; not fishes, not cetaceous ; but, animals resident both on land and in water—AMPHIBIA. Now by what *English word* shall we describe this genus of animals ?—are we reduced to the Latin word *Amphibia*, in an English translation ?—how shall we describe them to our countrymen ?

LOCKS OF DOORS.

CANTICLES V. 4.

I ROSE TO OPEN TO MY BELOVED; AND MY HANDS DROPPED *with* MYRRH,
AND MY FINGERS *with* SWEET SMELLING MYRRH, UPON THE HANDLES
OF THE LOCK.
MY BELOVED PUT IN HIS HAND BY THE HOLE *of the door*, AND MY BOWELS
WERE MOVED FOR HIM.



THE following remarks are from Mr. HARMER, *Vol. I. p. 207.*

“The curious have remarked, that if their gates are sometimes of iron and brass, their *locks and keys* are often of *wood*; and that not only of their *houses*, but sometimes of their *cities* too. Russell, I think, makes this remark on the houses of Aleppo, as Rauwolff did long before him. As to those of their cities, Thevenot, speaking of grand Cairo, *Part 1, p. 143.* says, “all their locks and keys are of *wood*, and they have none of iron, no not for their *city-gates*, which may be all easily opened without a key. The keys are bits of timber, with little pieces of wire, that lift up other pieces of wire which are in the lock, and enter into certain little holes, out of which the ends of wire that are in the key having thrust them, the gate is open. *But without the key*, a little *soft paste* upon the end of one’s finger *will do the job as well.*” Rauwolff, *p. 23, 24*, does not speak of the locks and keys of wood in those terms of *universality* that Thevenot makes use of; he only says, their doors and houses are *generally* shut with wooden bolts, and that they unlock them with wooden keys. Probably it was so anciently, and that in contradistinction to them we read of cities with walls and *brassen bars*, 1 Kings iv. 13; and of breaking in pieces *gates of brass* and *bars of iron*. Isaiah xlv. 2. And according to this there may be something more in the emphasis of the following passage than has been remarked. “A *brother* offended is harder

CANTICLES v. 4.

to

to be won than a *strong* city: and *their* contentions are like the *bars of a castle*," not merely hard to be removed on account of their size, but on account of the materials of which they were made, as not being of *wood*, but of *iron or brass*."

"What Thevenot observes, of the ease with which their locks are often opened without a key, puts one in mind of those words, Cant. v. 4. "My beloved put in his hand by the hole, and my bowels were moved for him." He attempted, that is, apparently, to open the door by putting in his finger at the key-hole, according to some such method as that described by Thevenot; he attempted, but it did not open, my heart then was greatly moved. But what a strange explanation does Bp. Patrick give of those words, "*He put in his hand by the hole*," i. e. at the window, or casement; as if he would draw her out of bed:" &c. How unacquainted was this good Prelate with some of the customs of the Levant, or at least how inattentive to them in this place, not to say how indelicate!"

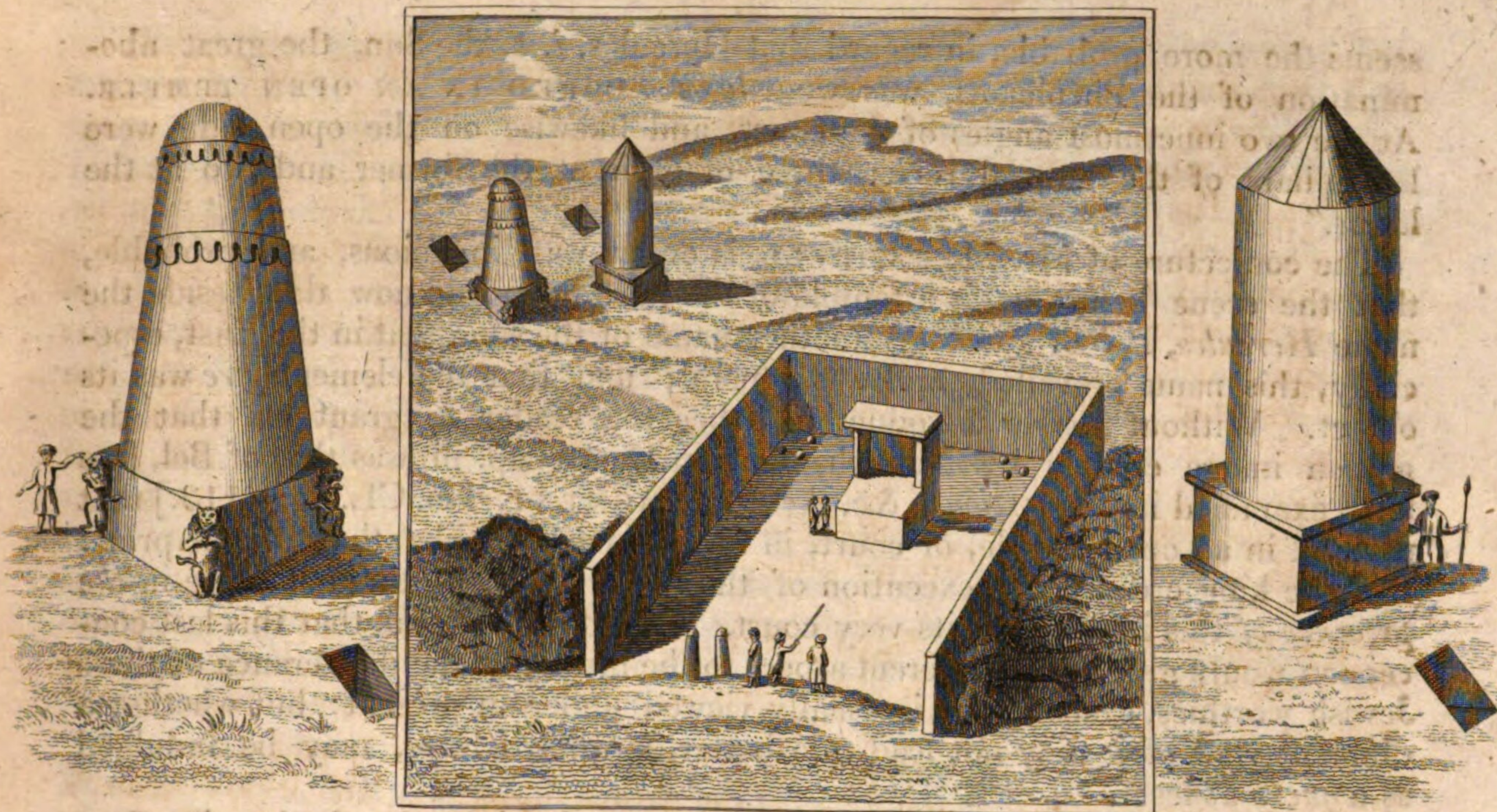
We find the same kind of *lock* applied to one of the gates of the city of Jerusalem, Nehem. iii. 3. "The fish gate . . . the doors thereof, and the *LOCKS* thereof, and the bars thereof." The same should appear also to have been used to the summer parlour of Eglon king of Moab, Judges iii. 23; and we are told that Ehud carefully "shut the doors of the parlour upon him, and locked them." This deceived his servants till "they took a key and opened them." This was probably an instrument of the same nature as that on our plate; and thus we may gather the Hebrew names of both its parts, the *LOCK*, (מנעול) Fig. D. E. F. and the *KEY*, (מפתח) Fig. I.

EXPLANATION OF THE FIGURE.

D an Egyptian wooden lock: it is nailed on to the door-posts, and has in it certain holes at G. It is fastened to the door at D; and at E are wires, so placed in holes corresponding to the holes in G, F, as that falling down they go into them, and the door is locked: there is a hole for the key H to go into it, which having wires fixed to it, so as to go into the holes at G, they thrust up the wires at E, and the door is unlocked, and may be opened. These wires are shewn, in this handle, or key, more distinctly at I.

From this figure the reader will easily conceive of the rattling made by a person attempting to open the door. It has been attempted to explain, elsewhere, the *myrrh* dropped on the lock. *Vide* FRAGMENTS, No. 449, p.

Since this of Dr. Pococke, Denon, has published a similar figure, at large. He appears to have been struck with the simplicity of the contrivance: and his opinion of it is, that it is of very great antiquity.



PLACE OF FIRE.

PLACE OF FIRE, OR FURNACE.

DANIEL, Chapter iii.

Extract from Mr. MAUNDRELL'S *Travels*, page 20.

"THIS dike was on the north side of the serpent fountain: and just on the other side of it we espied another antiquity, which took up our next observation. There was a court of fifty-five yards square, cut in the natural rock; the sides of the rock standing round it, about three yards high supplied the place of walls. On three sides it was thus encompassed; but to the northward it lay open. In the center of this area was a square part of the rock left standing; being three yards high, and five yards and a half square. This served for a pedestal to a throne erected upon it. The throne was composed of four large stones, two at the sides, one at the back, another hanging over all at top, in the manner of a canopy. The whole structure was about twenty feet high, fronting toward that side where the court was open. The stone that made the canopy was five yards and three quarters square, and carved round with a handsome cornish. What all this might be designed for, we could not imagine; unless perhaps *the court may pass for an idol-temple, and the pile in the middle for the throne of the idol:* which

DANIEL, CHAP. iii

seems

seems the more probable, in regard that Hercules, *i. e.* the Sun, the great abomination of the Phenicians, was wont to be ADORED IN AN OPEN TEMPLE. At the two innermost angles of the court, and likewise on the open side were left pillars of the natural rock; three of each at the former and two at the latter."

The conjecture of Mr. MAUNDRELL, is every way ingenious, and probable, that the scene before us, is a temple of the sun: now, we know that beside the name *Hercules*, *Bel* or *Baal* was another name of the sun; that in the East, especially, this name prevailed, and was general; and that the element *fire* was its object. Without further introduction, I beg the reader to grant me that the golden image erected by Nebuchadnezzar, Dan. chap. iii. was that of Bel, [we have examined its *proportions*, &c. &c. in FRAGMENT, No. CL. page 113.] that it stood in an open temple, or court, in form somewhat like that in our print: that the king ordered the execution of the three Hebrews, to take place in *the presence* of this image,—in its very court. I shall not conceal, that this last concession would give a very different aspect to the history of the deliverance of these Jewish worthies, from what it is usually viewed under at present: but whether a different view of it may not lead to a better, is what, I hope, may be indulged as a *query* at least.

Observe, 1. The Chaldee word used to denote what is rendered "burning fiery FURNACE" [*מִנְיָה* ATUN, emphatically ATUNA] signifies simply "a place of fire;" without determining its form, construction, or use. To suppose therefore that it was a close, confined, as it were, solid, building, is to limit the import of the original term unwarrantably. Mount *Ætna* (ÆTUNA) in Sicily, seems to have derived its name from this word, as a place of fire, a volcano, which had several flaming mouths, each of which mouth was a *furnace*; as Virgil calls them, *Eneid* iii. 571—582. *Georg.* i. 471. *Vide* *Lucret.* vi. 681. *Ovid* *Metam.* xv. 340. and this idea of a volcano, is perfectly applicable to the use of this word in the *Targum*; for we know that Sodom, &c. was destroyed by a volcano, "and the smoke of the city went up as the smoke of a *furnace*," which the *Targum* renders "the smoke of an ATUNA;" *i. e.* a place of fire. *Gen.* xix. 28. Now, the smoke arising from an extent of country, the smoke from a volcano, is by no means to be limited by the idea of a building, a furnace, a kiln; but is much more open, spacious, and broad.

The account of the *Apochryphal* writer of the history of this miracle, says, that "the angel of the Lord descended, and smote the flame of fire out of the *furnace* (or place of fire) and made the middle of the furnace, as if a *moist, dewy, whistling*, wind" was passing over it. Now, if it was exposed to the passage of wind over it, it could not be a closed building. This seems to be finally determined, by the recollection that Nebuchadnezzar saw what was passing within this place of fire; which he could not possibly do, if it were closed like our tile-kilns; but if it were open, like the place of fire in our print, he might very easily be a spectator of every occurrence of which it was the scene.

We

We are now to consider the propriety of supposing, that Nebuchadnezzar had erected his image in the plains (*levels*, observe) of Dura; that, before it was an open court, around which stood the worshippers; but that on the refusal of the Hebrews to worship it, a fire was kindled in this court, like those used in burning victims to Moloch; like those used in India, for the burning of Indian women; like those formerly used in burning the martyrs, &c. in Smithfield; and that the king (as on one occasion a Lord Mayor of London in Smithfield) commanded in person, "justice" to be done on the delinquents. This notion of an open furnace, or place of fire, appears to me of consequence to be understood, and to be adopted, instead of that closed structure of brick, which has usually been represented: as it appears to be more congenial to the customs of the country, to the idolatry of the people, and to the supposed dignity of the occasion. It leads us also to infer, that this transaction passed in the very sight, so to speak, of this golden image; in defiance of its influence, and power, which certainly must be admitted as most vigorous, most concentrated, within the sacred precincts of its own divine residence: yet here, where most competent to exertion, it was baffled, counteracted, and defeated.

I see no just reason for doubting but that the open temple, mentioned by Mr. MAUNDRELL, being in the country of Tyre and Sidon, was used for the worship of the Tyrian *Hercules*; who was, as hinted, the *Baal* of the East, *i. e.* the Sun; whose representative on earth was the element Fire. This element we know was worshipped in Chaldea, and the Chaldeans boasted of their Deity as superior to all others, because he was able to consume their representations, whether in wood, stone, metal, or &c. The same notion of the identity of these deities was entertained by the Tyrians; and hence we read, that to prevent his desertion from their city, they chained the statue of Hercules to the altar of Apollo. If then the deity of the Tyrians was the same as the deity of the Chaldeans, we may infer that the rites of his worship were much the same in both countries, and since we find an *open court* in Syria, still remaining, it takes off the difficulty (if any were supposed) in considering an *open court* as the scene of the religious rites of the same deity in Chaldea; and we ought to recollect that the Pagan rites of worship were generally performed in open courts, before a temple, and rarely within the temple itself.

On a former occasion, in reference to this subject, I wished for further information, to guide our conclusions on some of its circumstances. I am of opinion still, that the history is much more intelligible in the East than among ourselves; that the publicity of this execution would there be better understood; that the contest between (*Baal*) the deity Fire, and Jehovah, would there excite not merely the liveliest interest throughout the nation, but that the result of it would produce the most general confusion on one side, and the most vehement joy on the other; also that, when the Chaldeans saw their national deity vanquished, not by another element, as water, [of which we have a history] but by a protecting

protecting preserving power, infinitely its superior, their perplexity would be extreme; and they would feel their embarrassment with all the tenderness of Eastern conception, and with all the exquisite sensibility of Eastern imagination.

We are I think, beholden to Mr. MAUNDRELL for the confirmation of our former suggestions, by rendering very credible the notion of an *open* furnace, and by furnishing an instance in which such a construction of a sacred edifice was used in similar worship; as it might have been used to all the purposes attributed to the (ATUNA,) place of fire, in the history recorded in Daniel. I might further allude to traditions among the Eastern people of a similar trial of Abraham by Nimrod, and a similar deliverance: I might also describe the annual "festival of Fire" in the East, and the passing of the devotees over burning coals: with the means used to render the flame more vehement, when a devotee is about to consume himself; but I wave all these considerations, and for the present draw no other conclusion, than that of the *open* construction of the Chaldean ATUNA: and that the whole was transacted as a kind of sacrifice to the deity, and consequently in the immediate presence of his consecrated image.

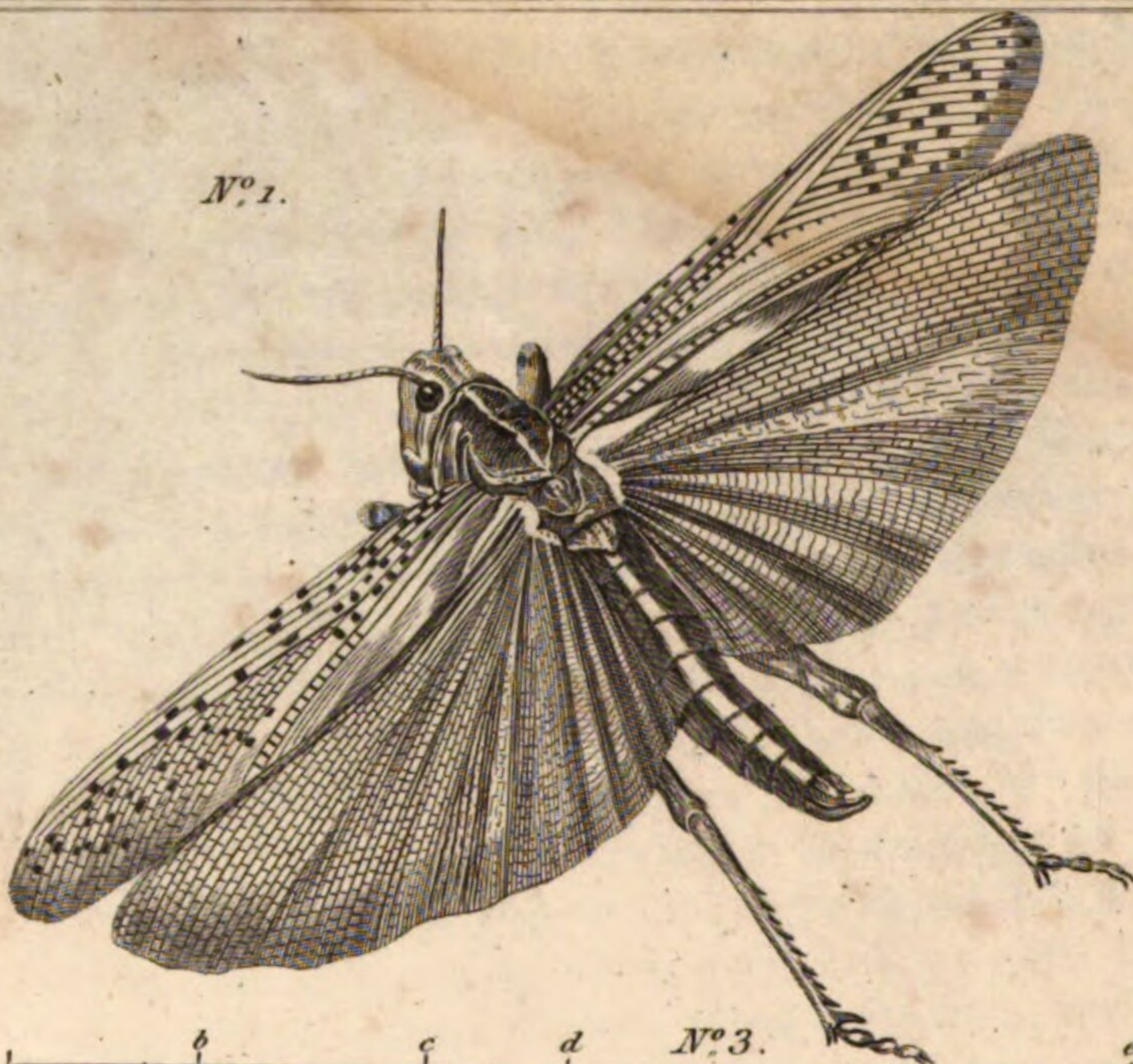
Mr. KING in his *Munimenta Antiqua*, Vol. I. p. 226, has paid considerable attention to this structure, described by MAUNDRELL, and has compared it with the *Cromlechs* of Britain, which he supposes to have been altars used for human sacrifices: "that we know," says he, "were introduced in the earliest ages, among the detestable superstitions of the Tyrians, and Sidonians." But that gentleman supposes what MAUNDRELL describes as the *throne*, to have been the *altar*, whereon the victim was slain, and he gives what he conceives to be a more correct delineation of this court, and structure, than that given by MAUNDRELL himself. For our own parts, we have thought it a duty to copy faithfully the representations of travellers; and this subject, as well as others; since in our opinion, there is no difference between re-writing a passage in an author, instead of giving it in the author's own language, *verbatim et literatim*, and re-delineating a delineation, which the original author has thought proper to offer to his readers.

The monuments represented on our Plate appear to be sepulchral, and the openings adjacent to them lead to Vaults &c. which have been described in FRAGMENT, No. CCXI. p. 42. May we suppose that previous to the interment of the persons (of rank, no doubt) for whom these sepulchres were designed, their corpses had undergone some kind of funeral service, or dedication to the divinity, in this open temple;—analogous to what is customarily performed in the Church, in our Funeral Service?

The Tower on the left in our print, is 30 feet 2 inches high; that on the right is 33 feet high, of solid materials; but of rough workmanship.

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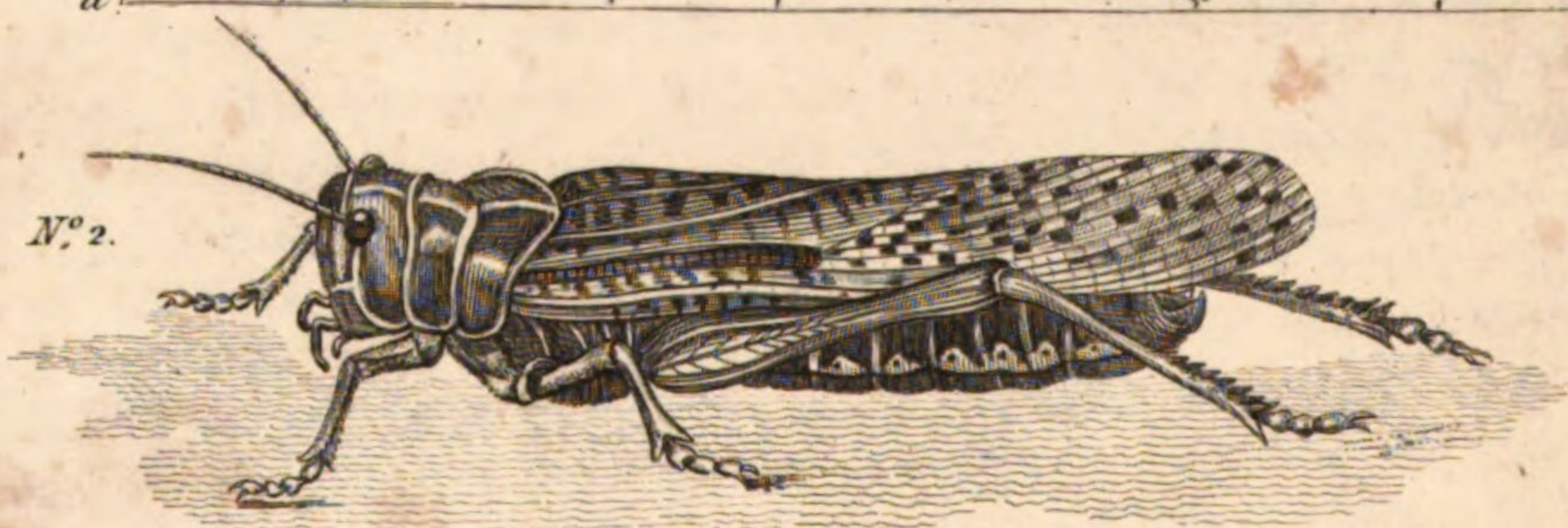
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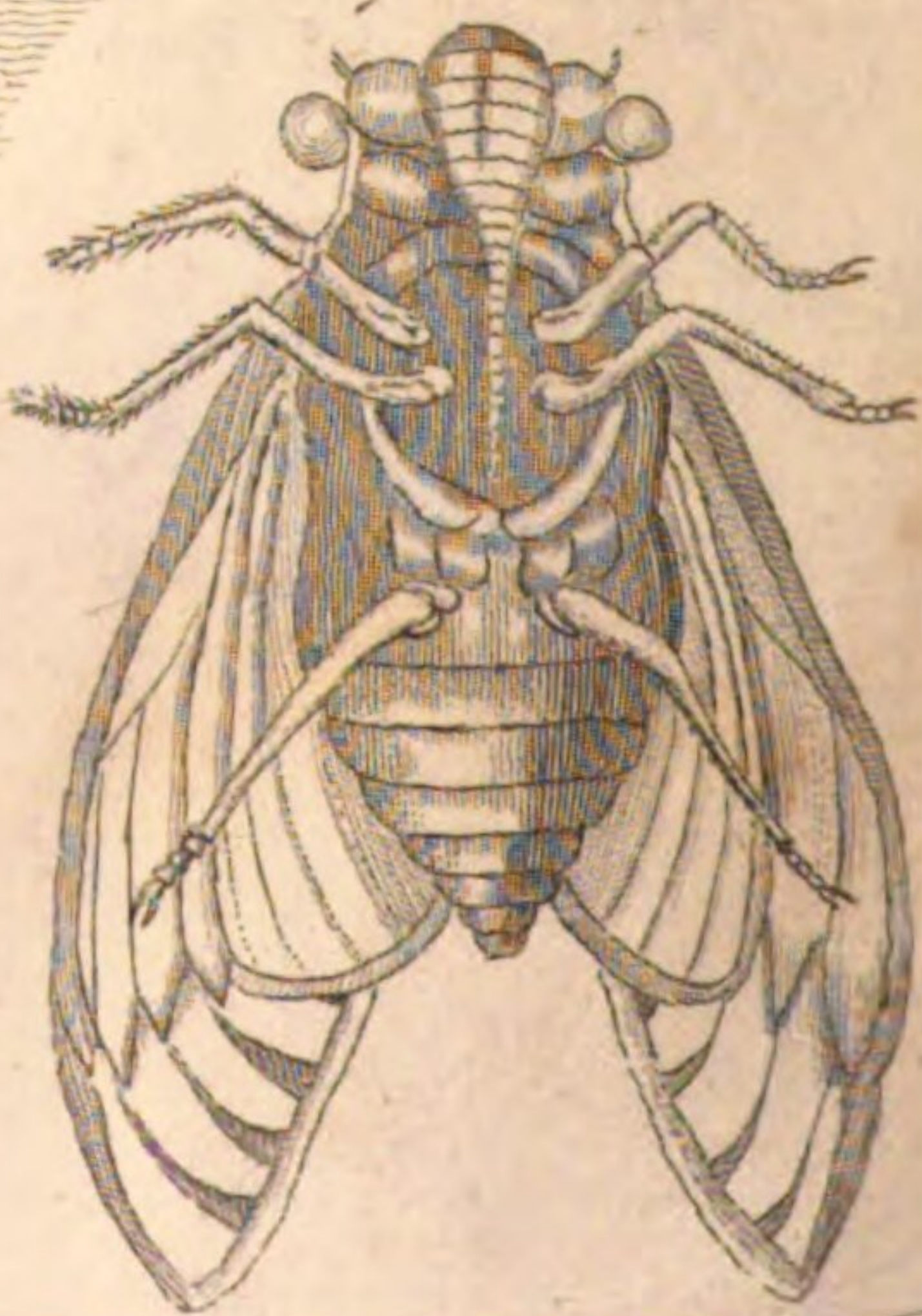
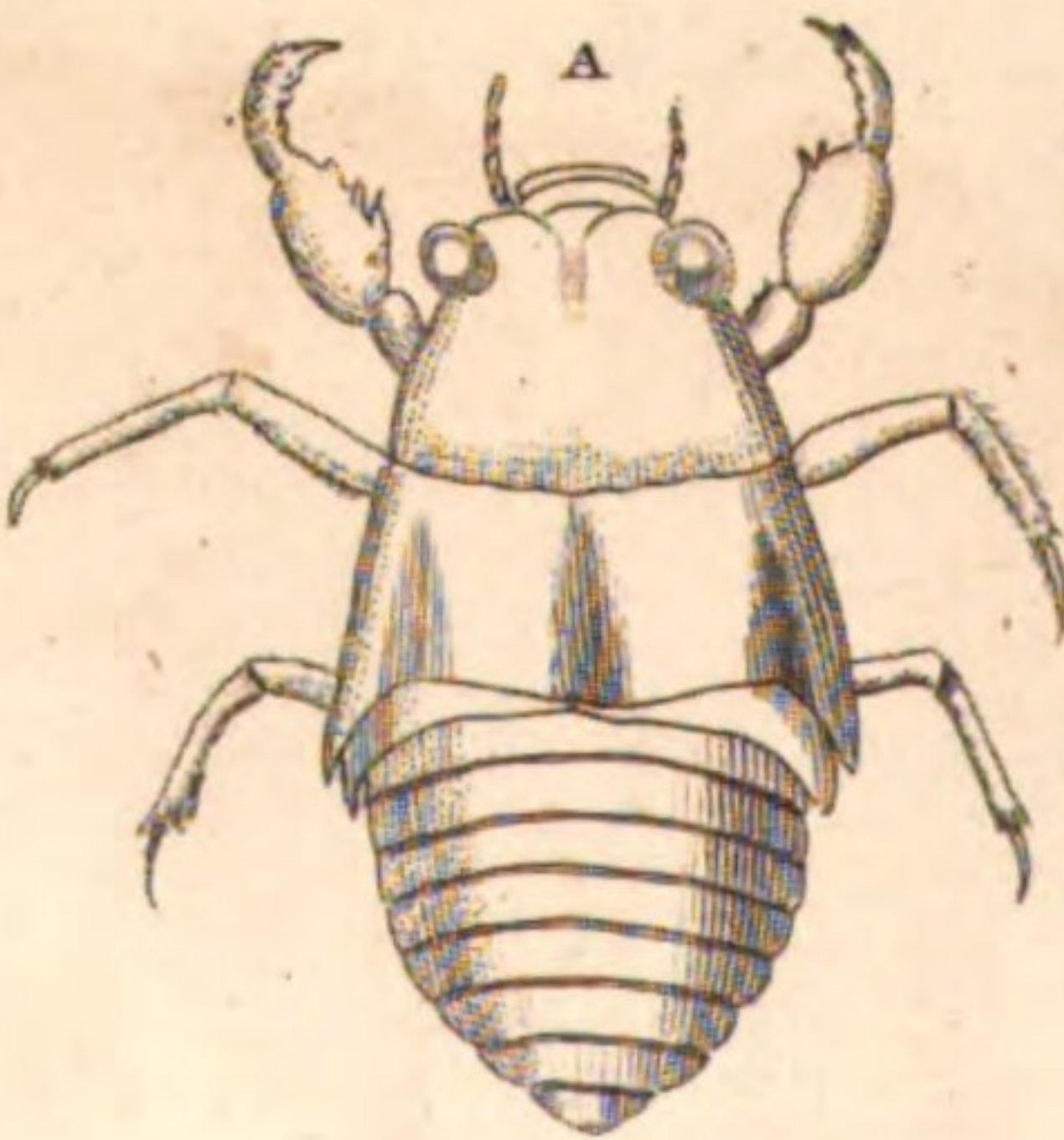
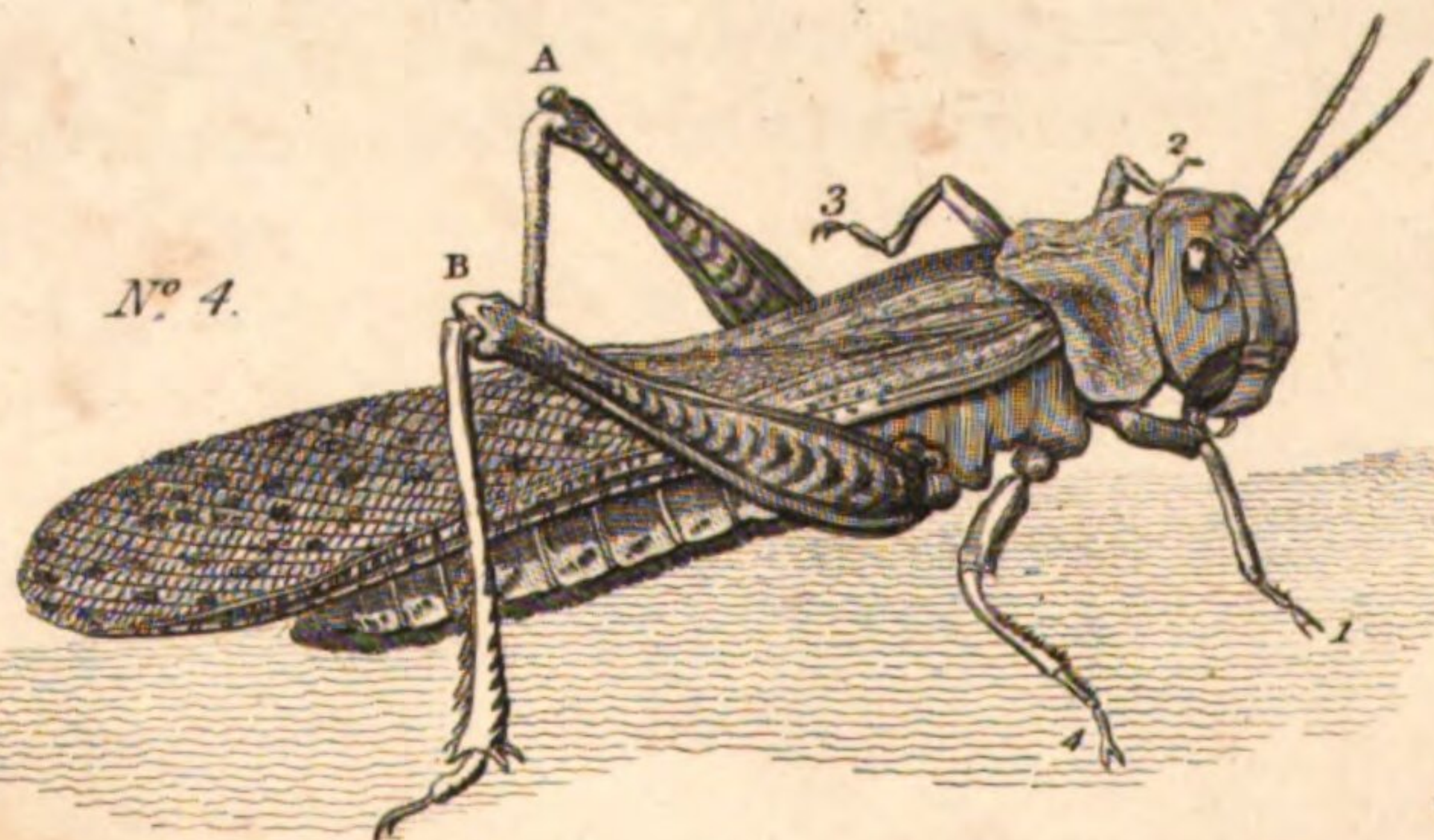
LOCUST.

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N^o 2.



N^o 4.





OF THE LOCUST.

THE Locust is a creature so little known among us, either by its distinctions or its depredations, that we are by no means able to estimate the importance attached to its visitation, or that anxiety which, where it abounds, is employed to watch its motions. As there are many allusions to this insect in Scripture, it may be desirable to combine such parts of its history, as are calculated to justify what remarks it has already received, or such as it may hereafter receive.

This plate contains figures of the common *Migratory Locust*, from Dr. SHAW, the naturalist, Nos 1. 2. No. 4 is copied from the Gentleman's Magazine, 1748, at which time this Locust, with many others, was picked up in St. James's Park. Great apprehension was caused by them at the time throughout England, and they became the occasion of collecting much information; a part of which we shall set before the reader, as inserted in that Magazine.

“ A swarm of Locusts lately fell near Bristol, much resembling those that fell sometime ago in Transilvania, some of them are kept in spirits by the curious. A sort of Locust has also done great damage in Shropshire and Staffordshire, by eating the blossoms of the apple and crab-trees, but especially the leaves of oaks, which look as bare as at Christmas; the rooks devour these Locusts in prodigious numbers. *Gent. Mag.* July, 1748, p. 331.

“ Col. Needham, who had lived some time in Teneriff, told Sir Hans Sloane, that in 1649, Locusts destroyed all the product of that island: they saw them come off from the coast of Barbary, the wind being a Levant from thence; they flew as far as they could, then one alighted in the sea, and another on it, so that one after another they made a heap as big as the greatest ship above water, and were esteemed almost as many under. Those above water, next day, after the sun's refreshing them, took flight again, and came in clouds to the island, from whence they had perceived them in the air, and had gathered all the soldiers of the island and of Laguna together, being 7 or 8000 men, who laying aside their arms some took bags, some spades, and having notice by their scouts from the hills where they alighted, they went strait thither, made trenches, and brought their bags full, and covered them with mould. This did not do, for some of the locusts escaped, or being cast on the shore, were revived by the sun, and flew about and destroyed all the vineyards and trees. They eat the leaves, and

Edit. 2.

JOEL, Chapter ii.

even

the bark of the vines where they alighted. But all would not do: the Locusts staid there four months; cattle eat them and died, and so did several men, and others struck out in blotches. The other Canary islands were so troubled also, that they were forced to bury their provisions. *Gent. Mag.* 1748. p. 362.

“ They destroy the ground not only for the time, but burn trees for two years after; so that people in Ethiopia are forced to sell themselves and children for sustenance. *Jo. dos Sanctos*. [Compare *Gen.* ix. 20. *EXPOS. INDEX.* p. 25.]

“ I cannot better represent their flight to you, than by comparing it to the flakes of snow in cloudy weather, driven about by the wind; and when they alight upon the ground to feed, the plains are all covered, and they make a murmuring noise as they eat, and in less than two hours they devour all close to the ground; then rising, they suffer themselves to be carried away by the wind; and when they fly, though the sun shines ever so bright, it is no lighter than when most clouded. The air was so full of them, that I could not eat in my chamber without a candle; all the houses being full of them, even the stables, barns, chambers, garrets, and cellars. I caused cannon-powder and sulphur to be burnt to expel them, but all to no purpose; for when the door was opened, an infinite number came in, and the others went out, fluttering about; and it was a troublesome thing when a man went abroad to be hit on the face by those creatures, sometimes on the nose, sometimes the eyes, and sometimes the cheeks, so that there was no opening one's mouth but some would get in. Yet all this was nothing, for when we were to eat, those creatures gave us no respite: and when we went to cut a bit of meat, we cut a Locust with it; and when a man opened his mouth to put in a morsel, he was sure to chew one of them.

“ I have seen them at night, when they sit to rest them, that the roads were four inches thick of them, one upon another; so that the horses would not trample over them, but as they were put on with much lashing, pricking up their ears, snorting, and treading very fearfully. The wheels of our carts, and the feet of our horses bruising those creatures, there came from them such a stink, as not only offended the nose, but the brain. I was not able to endure that stench, but was forced to wash my nose with vinegar, and hold a handkerchief dipped in it continually at my nostrils. The swine feast upon them as a dainty, and grow fat; but nobody will eat of them so fattened, only because they abhor that sort of vermin, that does them so much harm. *BEAUPLAN's Hist. Ukraine. Gent. Mag.*

DESCRIPTION of the LOCUST of 1748.

“ This insect in form nearly resembles a grasshopper; it hops and flies in the same manner, but is more robust, of a different colour, and has four large wings, like those of the pond-keeper or horse-stinger: they are transparent and brown, divided into panes by a small black line, and their texture is very elastic; the wings of one, whose body was two inches and a half in length, being extended, measured five inches from point to point; some have been taken of a much larger size. The body is scaly, the head large, and the face streaked with brown

brown and white; the eyes are very bright, and of a hazle colour. It has jaws on each side, which open and shut horizontally, of a black, hard, horny substance, which, when opened, discover a tongue like a small-seed French bean; they are round like a pair of pincers, meeting with great exactness, and are not keen but blunt. Over these jaws where they meet, it lets fall a thin cover, which it contracts and folds at pleasure, and puts forth a considerable distance from the mouth; and probably the thin substance is of use to draw towards it blades of grass, or any other thing which it eats of a yielding nature. A horse fly being put into a vial to one of these Locusts, was devoured by it in a short time. *Gent. Mag.* 1748, p. 364.

“Numbers of Locusts (discovered the hot sultry day before in clouds, by the help of optic glasses) were found in St. James’s Park, and places adjacent. It is further to be noted that it feeds itself with its fore claws, like a squirrel, and its ordure is long, and when first voided red like coral. It having been sometimes mentioned as a creeping, and sometimes as a flying insect, we find by SHAW’s Travels that it is both. The upper wings seem only for a covering to the under, which, expanded, are as broad as the body is long. They sometimes eat one another. *Friday, July 5, Gent. Mag.* p. 377.

“It is surprising to observe with what quickness they devour cabbage-leaf, lettuce, or other herbage. In the field, they fly, and dart as swift as the swallow, though not far at a time. And in very windy, or rainy weather, are more dull, and sooner caught. Charlton, indeed, in his *Exercitationes de differentiis & nominibus Animalium, et Insectorum*;—COLEOPTERORUM Classis, or Class of the sheath-wing species, page 45, mentions a Locust brought by Mouffet from Barbary, five inches long, of the cucullated kind, with a pyramidal head, and, almost on the top, two little broadish erect horns, near an inch in length, representing the lofty double Turkish plumage, worn by the Janizaries. *Gent. Mag.* p. 365.

BRESLAW, Aug. 22.—“Another swarm of these devouring creatures came from *Patchkau* to *Ober Schreibendorff*, where they fell upon two gardens, and ruined every thing in them. As they were a little straitened in their quarters, they laid one upon another in heaps, to the height of one’s knee, and being driven from thence, they eat up all the grass in the meadows, and even all the rushes and reeds about the village of *Deutsch Jeckel*; from thence they continued their flight to *Hoben Giersdorff*, where they have destroyed several fields of buck wheat. All the fruits of the earth that are not got in, as well as the grass, reeds, and in short every green thing is totally destroyed. They tried at first to drive them away with poles, but to no purpose. At length somebody very luckily thought of beating a drum, upon which they immediately took flight, but settled soon after upon the trees in the forest, from whence they were driven by the same means. They made their retreat by *Arnsterberg*, and then passed through the county of *Glatz* into *Bohemia*, where they have committed dreadful devastations on the lands of Count Wallis. These insects are about the length of one’s finger, and of all colours, grey, green, yellow, black, red, and brown. Some people pretend

pretend to say, that each of these bands has a Captain, of a most enormous size ; this is certain, that they leave behind them an intolerable stench.

Ib. Aug. 30. “ The dreadful plague of Locusts spreads more and more. It is observed, that the several swarms, which have lighted on divers districts, are only detachments from the grand body, to which, after foraging awhile to the right and left, they repair. You cannot conceive the noise made by these insects, as well in their flight, as when they rest on the ground. The 25th the main body took their flight towards the town of *Brieg*, forming a cloud of several miles in length and breadth, and darkening the sun wherever they passed, so that at a small distance travellers could not descry the town. Their flight was low, and great numbers lodged on the roofs of houses, and on the ramparts ; but the greatest part fell upon the fields and the gardens, where they devoured every thing. They sometimes cover the trees so thick, that one cannot see either leaf, twig, or bark. There was a swarm of them at *Neudorf*, where they remained, numbed with cold, the 26th ; but the two days following proving warmer, they revived again, and advanced to *Radelweix*. Besides the destruction they make every where, they leave a great stench behind them.” *Gent. Mag.* 1748, p. 415.

Such is the general history of the Locust-swarms, and their devastation : a more particular account of the manners of this creature and its noxious qualities, we translate from ROZIER’s *Journal de Physique*, Nov. 1786, p. 321, &c. It is furnished by M. BARON, *Conseiller en la Cour des Comptes*, &c. at Montpellier.

“ These insects seek each other the moment they are able to use their wings : after their union, the female lays her eggs in a hole which she makes in the earth : and for this purpose, she seeks light, sandy earth, avoiding moist, compact, and cultivated grounds. A Spanish author says, “ Should even a million of Locusts fall on a cultivated field, not one of them may be expected to lay her eggs in it ; but if there be in this space a piece of earth not cultivated, though it be very small, thither they will all resort for that purpose.” The sense of smelling is supposed to direct this preference. The eggs lie all winter, till the warmth of spring calls them into life. They appear at first in the form of worms, not larger than a flea, at first whitish, then blackish, at length reddish. They undergo several other changes. According to the heat of the season and situation is the time of their appearance. “ I have seen,” says the Spanish writer already referred to, “ at *Almeria* millions creep forth, in the month of February, because this spot is remarkably forward in its productions. In *Sierra Nevada* they quit the nest in April ; and I have observed that in *La Mancha* they were not all vivified at the beginning of May.” Heat also promotes their numbers ; for, if the heat be sufficient, every egg is hatched : not so if cold weather prevails. Dryness favours the production of Locusts : for, as this insect deposits its eggs in the ground, enclosed in a bag, and this bag is smeared with a frothy white mucus, if the season is wet, this mucus becomes rotten, the ground moistens the eggs, and the whole brood perishes. Eight or ten days rain, at the proper season, is a certain deliverance from the broods committed to the earth.

“ There

“ There is no doubt on the changes to which the Locust is subject. The same animal which appears at first in the form of a worm, passes afterwards into the state of a *nymph*; and undergoes a third metamorphosis by quitting its skin, and becoming a perfect animal, capable of continuing its species. A Locust continues in its *nymph* state 24 or 25 days, more or less, according to the season: when, having acquired its full growth, it refrains during some days from eating; and gradually bursting its skin, comes forth a new animal full of life and vigour.

“ These insects leap to a height two hundred times the length of their bodies, by means of those powerful legs and thighs, which are articulated near the centre of the body. When raised to a certain height in the air, these insects spread their wings, and are so closely embodied together, as to form but one mass, intercepting the rays of the sun, almost by a total eclipse.

“ In the south of France, besides the labours of men to discover the eggs of the Locust, about September and October, or in the month of March, they turn troops of hogs, into the grounds that are suspected of concealing their nests, and these animals, by turning up the earth with their snouts, in search of a food which they are fond of, clear away vast quantities.

“ In Languedoc they dig pits, into which they throw them:—great care is necessary in destroying these insects, that they are not hurtful after they are dead. The infection spread by their corrupting carcasses is insupportable. *Surrius* and *Cornelius Gemma* both, mentioning a prodigious incursion of Locusts in 1542, report, that after their death, they infected the air with such a stench, that the ravens, crows, and other birds of prey, though hungry, yet would not come near their carcasses. We have ourselves experienced two years ago the truth of this fact; the pits where they had been buried, after twenty four hours, could not be passed.

“ We should not omit, as a very essential circumstance, that the hunting of these Locusts should be engaged in in the morning, the evening, or when the weather is misty. This insect, at those times, does not see equally well; it does not fly so high, and it suffers itself to be approached more closely. M. GLEDITCH says, Locusts rise both faster and higher in clear, warm, dry weather: but, when the air is loaded with vapours, and rain, or if the temperature of it be rather *chilly* at sun rise, or sun setting, they are stiff and slow in their motions; they move their wings with greater difficulty, and they are more easily destroyed.

“ There are several kinds of Locusts: one kind has an appendix at the tail, which serves it as an auger to pierce the earth with: others have not this piercer, but only a very short tail.” So far M. BARON.

Let us now consider some of this information more closely. 1. *Heat and dryness are favourable to the increase of Locusts.* I think therefore, that when God threatens to bring a plague of Locusts over Israel, as in *Joel*, chap. ii. it may imply also a summer of drought. So we read, chap. i. verse 20. *The rivers of water are dried up; the fire hath devoured the pastures of the wilderness:*—and after the removal of this plague, chap. ii. verse 33. *The Lord giveth the former rain moderately*

derately...and the latter rain...and will by means, no doubt of these showers, restore the years that the Locust hath eaten. Indeed on attentively perusing that chapter, we shall find that these extracts are direct comments on it. Compare a few verses. *Blow the trumpet .. sound an alarm .. let all the inhabitants of the land tremble, as at Teneriffe, when the whole population watched the flying invaders, with the most lively anxiety. A day of darkness and gloominess .. of clouds .. of thick darkness, as the morning [dews or mists, suppose,] spread on the mountains: "they are like flakes of snow," says one writer, "when they fly, though the sun shines ever so bright, it is no lighter than when most clouded:"—"they darken the sun, so that travellers could not descry the town." A great [rather, a numerous] people, and a strong; their numbers are noticed by every writer. The land is as the garden of Eden before them—but behind them a desolate wilderness: "they eat up all sorts of grain, and grass, cabbage leaf, lettuce, blossoms of apple and crab trees, and especially the leaves of the oaks, grassy rushes, and reeds," yea, and nothing shall escape them. The appearance of them is as the appearance of horses; [Vide FRAGMENT, No. XLIV. p. 77.] Like the noise of chariots on the tops of mountains shall they leap. "You cannot conceive the noise made by those insects in their flight." Like the noise of a flame of fire that devoureth stubble: "they make a murmuring noise as they eat." Before their face the people shall be much pained..They shall run like mighty men; they shall climb the wall like men of war...They shall run to and fro in the city; they run upon the wall; they shall climb upon the houses; they shall enter in at the windows like a thief: See what is observed page 2, of "every room being full, and even every dish of meat." After the terrible devastation which these ravagers had committed, the Lord calls to repentance; and promises, on the penitential humiliation of his people, to relieve them from this ravager. *I will remove far off from you the northern army: and will drive him into a land, barren and desolate, with his face toward the East sea, and his hinder part toward the utmost sea: and his STINK shall come up and his ILL SAVOUR.* It is remarkable, that all our extracts agree in recording the *stink* and *ill savour* of the Locust: "they leave behind them an intolerable stench:"—"they leave a great *stench* behind them:" and M. BARON gives strict orders concerning the effectual interment of these masses of corruption; observing, "the infection left by their carcasses is UNSUPPORTABLE."*

The prophet Nahum observes of the Locusts, that, *they camp in the hedges in the cold day, but when the sun ariseth they flee away.* Every observer notices the torpid effect of cold, and the invigorating powers of heat, on the Locust. But 2. there is another remarkable particular which appears to have considerable connexion with some things said by us on Exod. xvi. 13. p. 44. viz. that, "in the morning, or evening, or in misty weather, Locusts do not see equally well, nor fly so high; they suffer themselves to be more closely approached; they are stiff and slow in their motions; and are more easily destroyed." By turning to the passage, the reader will perceive that we considered the word *Selav* as denoting

noting a *mist*, or *fog*: and we thought it not impossible that the word *selavim* might in Numb. xi. 31. express those *clouds* of Locusts, which, we are informed, compose these flying armies.—The opposition of two winds was calculated to produce a calm; and a calm to cause a fog; the letting the Locusts drop, the gathering them during the evening, all night, and the next morning, appear to agree with these extracts, and with our representation; while the fatal effects, verses 33, 34, *while the flesh was yet between the teeth of the people*, seem to be precisely such as might be expected, from the stench, &c. of the Locusts, *which they spread all abroad for themselves round about the camp*. Could a more certain way of generating a pestilence have been adopted, considering the *stench* uniformly attributed to them in all places, and the malignity attending such an infection as their dead carcasses so exposed *must* occasion?

3. We shall be excused for an allusion to what, on a former occasion, was offered in explanation of Eccl. xii. 5.—[FRAGMENT, No. XLIV. p. 78.] where an old man is signified by the Locust, as incapable of enjoying a certain appetite, yet fully subject to its power.—The reason for allegorizing such a character under the figure of a Locust, which we then could not determine, may be gathered from a note of M. BARON, whose words are—

“ Ces insectes sont si fortement joints dans l'accouplement, que les prenant avec la main, ils ne se séparent point. Ils restent ainsi dans la même situation plusieurs heures, les jours et les nuits entières; si vous tentez de les séparer, vous sentez qu'ils font résistance, et ce ne peut être qu'avec effort que vous en venez à bout.”

This is a complete vindication of the version adopted by *Pagninus*, in the passage of Ecclesiastes; and, being drawn from nature, shews how the *same* notion might be expressed under the same similitude, as well by other observers, as by the sagacious Solomon.

4. We read *Rev. ix.* of the Locusts, that “ the sound of their wings was as the sound of chariots of many horses running to battle;” this we have seen explained on the passage in *Joel*, p. 6. When it is added, “ they had tails like unto Scorpions, and stings in their tails,” we may, I suppose, refer these *tails* to those piercers with which some kinds of them are furnished, “ which they use to pierce the earth; while others have only a very short tail:” so that this particular, which at first seems unnatural, yet is strictly in nature.

On *Leviticus xi. 20.* we could not tell whether the four *Hebrew* names of the Locust are those of several kinds, or of the same kind in its distinct states. It is certain that in its different states the Locust receives from the Arabs different names, as, at first *Daba*, then *Gauga*, then *Jirad*, which is their common name, in their perfect state, at Aleppo, says Dr. RUSSELL: nevertheless, we incline to receive the Hebrew words as expressing different kinds; and our extracts affirm clearly, that there are considerable differences among them,—even among such of them as fly together in the same body, or cloud.

Compare *Expos. Index* on *Prov. xxx. 24. et al.*

EXPLANATION

EXPLANATION OF THE PLATE.

No. 1 Is the common Migratory Locust; the *Arbah* of the Hebrew Scriptures, I presume, with its wings expanded in the act of flying. The wings are thin, and beautifully marked. The hind legs are stretched out behind the body.

No. 2. The same Locust in the act of creeping: the hind legs thrust out behind, the other legs, in front, are also employed in movement.

No. 3. As we have seen in our extracts that some Locusts are considerably larger than others, and from thence are suspected to be Captains, or leaders of the host, we have, on this line, marked the dimensions of what appears to be a very large one, taken from a subject engraved in DENON's Travels in Egypt. *a, b*, the length of his *antennæ*: *b*, his length from his forehead to the end of his tail: *b, c*, his corselet: *d, e*, the hinder part of his body: *c, f*, the length of his wings: *a, f*, his whole extent, wings included. Whether this be a Captain we do not know: if a species be of this size,—what formidable devourers!

No. 4 Is copied from the Gentleman's Magazine for 1748, and is a Locust taken in England. We shall use it to explain the passage Lev. xi. 20. "*But, these ye may eat, from among winged creepers going on four feet, i. e. on the four front feet, 1, 2, 3, 4: those which have joints at the upper (or higher) parts of their hind legs.*" These hind legs, as appears by consulting the passage, have a specific name, *regeli*; and so have these joints also, *caroim*: they are marked A A. These *regeli* and *caroim*, are evidently the members which the creature employs "*to leap withal upon the earth,*" as mentioned in the close of this verse. The front legs seem to be considered as having *paws*, rather than feet; and the creature occasionally uses the front pair, as hands to convey food to its mouth. Compare Judges vi. 5. Job xxxix. 20. Amos vii. 1. *et al.* where our translation uses the word *grasshoppers*: and note the distinctions between *gab*, *chagab*, (*gub*, *chagub*) and *arbah*; which certainly are different kinds; though we are at a loss to identify them. This varies the spirit, at least, of some passages, if not their general import.

As our translators have used the word *grasshopper*, to denote every species of Locust, they seem to have committed a similar error with those who thought the Locust to be the *cicada*, which also has been very commonly confounded ("by the major part of translators," says Dr. Shaw) with the *grasshopper*, but which the comparison afforded by our Plate, shews to be very different. This *cicada* appears in the hot months of summer, and continues its shrill chirping during the greater part of the day, sitting among the leaves of trees. We have plenty of allusions to it in Anacreon, and others in Theocritus; where it has been by some rendered *locust*, by others *grasshopper*: perhaps it may be alluded to in Scripture: can it be the *beetle* of our translators, Lev. xi. 22? Vide Theoc. Idyll. 1. Antipater, Anthol. lib. i. cap. 33. Ælian, &c. The Athenians called themselves *grasshoppers*; as supposing themselves to be earth-born (*autochthones*) like those insects: some wore golden *grasshoppers* in their hair. A. The *larva* of this insect.



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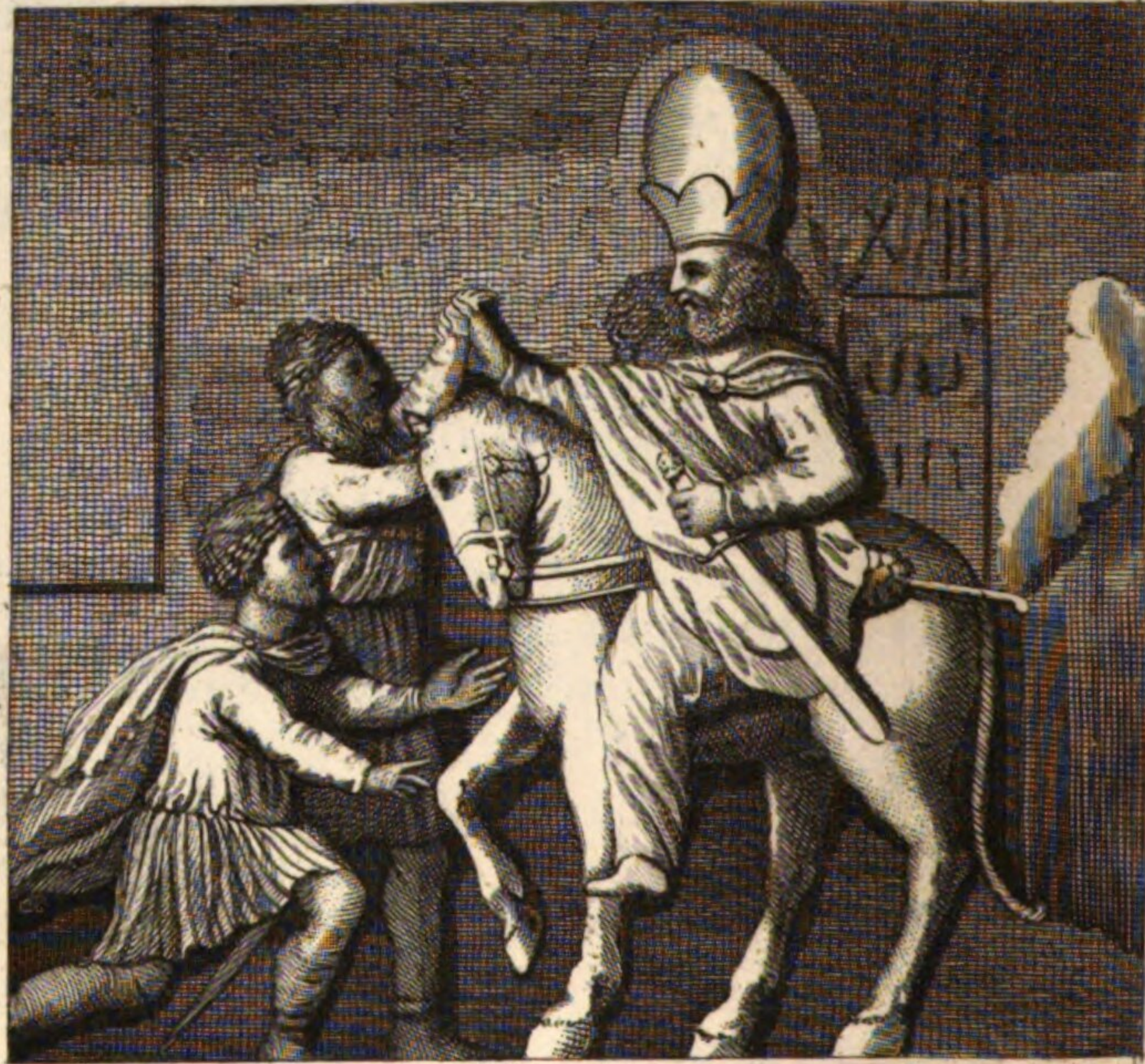
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זֶבֶד־בֶּן־חֲמִישׁ וְדֹנֶה־בֶּן־אַחַד־עָשָׂר

Nº 10.

Nº 5.

וְכֹהֵנִים זֶבֶד־בֶּן־חֲמִישׁ וְדֹנֶה־בֶּן־אַחַד־עָשָׂר

Nº 4.



ΤΟΥΤΟΤΟ ΡΟΕΥΤΟΝ ΜΑΧΛΑΚΝΟΥ
ΘΕΟΥΑΡΖΑ ----- ΣΙΑΩΣΒΑΚΙΑΕΩΝ
ΑΡΙΑΝΩΝ ----- ΘΕΩΝΥΙΟΥ
ΘΕΟΥΗΑΝΑ ..ΥΒΑ...ΕΩΣ...

Nº 9.



Nº 11.

וְכֹהֵנִים זֶבֶד־בֶּן־חֲמִישׁ וְדֹנֶה־בֶּן־אַחַד־עָשָׂר
ΤΟΥΤΟΤΟ ΠΡΟΩΝΟΝ ΔΙΟΘΕΟΥ

BAAL
and
MOLOCH.



ΕΙΣ ΤΗΝ ΕΚΚΛΗΣΙΑΝ ΤΗΣ
ΚΑΤΑ ΤΗΝ ΕΚΚΛΗΣΙΑΝ ΤΗΣ
ΕΚΚΛΗΣΙΑΣ ΤΗΣ



ΤΟΥΤΟΤΟ ΡΟΕΥΤΟΝ ΜΑΧΑΛΑΝΟΙ
ΘΕΟΤΑΡΖΑ ----- ΣΙΑΣΒΑΚΙΑΣΟΝ
ΑΡΙΑΝΟΝ ----- ΘΕΟΝΤΙΟΥ
ΘΕΟΤΑΡΙΑ ΥΒΑ ΕΩΣ



ΕΙΣ ΤΗΝ ΕΚΚΛΗΣΙΑΝ ΤΗΣ
ΤΟΥΤΟΤΟ ΠΡΟΕΥΤΟΝ ΔΙΟΘΕΟΥ

IMAGES OF BAAL AND MOLOCH.

Amos, Chapter v. Verse 26.

THE following letter was drawn up with a view of being laid before the Royal Society, as having originated from, and being connected with, an early Number in the *Transactions* of that highly respectable body. The topics it discusses refer clearly to a Bible subject, and strengthen some suggestions formerly thrown out by us, [*Vide* FRAGMENT, No. CXIII. p. 127.] It leads also to a further acquaintance with the deities of those countries where Scripture history occasionally introduces us, and therefore may with propriety find a place in the present work.

Thoughts on the Subject of two Inscriptions cut in the Rock, at Persepolis; engraved in the Philosophical Transactions, Vol. XVII. No. 201.

Having been engaged in searching for information on a subject of antiquity, I happened to examine the copies of two Persepolitan inscriptions engraved in the *Philosophical Transactions*, No. 201, of which the following history is given us by the gentleman who communicated them, who signs himself A. F. Esq. They were retrieved from the papers of Mr. FLOWER, agent in Persia for the English East India Company. While a merchant at Aleppo, he visited the ruins at *Chihelminar*, or *Persepolis*, for the purpose of procuring "a draught of the place, and the stories there pictured and carved." Then follow the copied inscriptions, with an account of them, said to be taken at *Nocturestand*, and *Chahelminar*, in Persia, November, 1667.

"No. 1, 2. These two characters are engraven on the breasts of two horses, cut out of the mountain of black marble, at *Nocturestand*, distant a league from *Chahelminar*, or the ancient *Persepolis*; one whereof is said to be *Alexander's*, the other *Rustram's*, [a famous hero supposed to have lived about the time of *Cambyse*]. No. 1. This character hath some similitude with the ancient Hebrew; but the Persians would have it their own, though they understand not a letter." So far Mr. FLOWER.

No. 2. is a Greek inscription, no doubt to the same import as the upper one in Persian characters; it should be read as follows, the smaller letters supplying the deficiencies of the original sculpture; some produced by the all-corroding hand of time, others by the ignorance, or inadvertence of the sculptor.

ΤΟ ΠΡΟΤΟ[μ] [π]ΡΟCΩΠΙΟΝ ΜΑΕΛΑΧΝΟΥ

ΘΕΟΥ ΑΡΖΑΧΟΥ ΒΑΣΙΛΕΩC ΒΑCΙΑΕΩΝ

ΑΡΙΑΝΩΝ υΙΟΥC ΘΕΩΝΤΙ[δ]ΟΥ

ΘΕΟΠΑΠΑCΟΥ ΒΑCΙΛΕΩC

"The image of the countenance of the deity *Malach*; (erected) by *Arsaces*, king of kings, the *Arrian*; son of *Theontius*, son of *Theopapus*, king (of kings)." It is evident that this Greek is the production of a Parthian, or a foreigner from the Greek language; as well by its omissions of letters as by its redundancies. It is not, however, worse than what we meet with elsewhere, of Arabian composition.

We learn from it, 1. That this figure represents the god *Maelach* or *Moloch*. 2. That it was executed by order of *Arsaces*, no doubt the second of that name, on behalf of *Arsaces I.* whose name he assumed; and was sculptured, apparently, by artists who had received a tincture of Grecian art. 3. It informs us of the country and family of *Arsaces*: which has been variously reported. *Arsaces*, say some writers, was of the family of the *Achæmenidæ*, the royal family of Persia; others say he was a Parthian. *Strabo* says he was king of the *Dahæ*; *Georgius Syncellus* affirms, that he was a nobleman of *Bactria*. Now these reports are partly true, partly erroneous: he was, as appears by our inscription, a noble, because he was of royal descent, being a grandson of king *Theopapus*. He might be also a king [or perhaps a governor, a satrap]

Amos, Chapter v. Verse 26.

as being of royal birth; but, whether he exercised the office of royalty over a kingdom, may be doubted. As to his native province, I suppose it was Aria, or Ariana, which was a very extensive province of Persia, bounded by the Indus on the East, by the Great Sea on the South, by Parapamisus North, and by the limits of Media, &c. West. This province lying remote, and being of great extent, was a favourable situation for commencing revolt. Of this province he might be governor, whether native or not: and therefore sur-named "the Arian." The revolt of Arsaces was occasioned by the ill usage his brother Tiridates received from Agathocles, regent of Persia, &c. in the absence of the king, Antiochus. I suppose Tiridates was the elder brother of Arsaces. We read also, that at the time of this revolt of Arsaces in Parthia, *Theodotus* revolted in Bactria. Is this *Theodotus* the *Theontius* of our inscription? If so, and if Theodotus was the father of Arsaces, we see how they might act in concert. This is not certain; yet as *Theodotus* signifies "God's gift," and *Theontius* signifies "God's honour," the import of the names, which are evidently translations from the native language into Greek, might be derived from the same Parthian title, or appellation. It is true, we do not find the word *papus* used in an elegant application among classic Greek writers; but we have the name of Philopapus, the Syrian, on a monument at Athens; and Theopapus seems to be perfectly synonymous with the Hebrew *Abiel*, "God my father;" being compounded of *Theos* God, and *papas* father.

The second inscription we are told "is written on *Rustram's* horse." It is, clearly,

TO ΠΡΟΤΟ(μ) ΠΡΟCΩΠΟΝ [β]ΗΛΟC ΘΕΟΥ

"The image of the countenance of the god Belus."

This image of Belus, strengthens the supposition that his companion is the god Moloch; they being repeatedly represented together. This sculpture, then, presents the two principal deities of the country.

It is impossible to determine whether these inscriptions were correctly copied by Mr. FLOWER; if they were, the use of the Roman L instead of the Greek Λ in the same word, deserves notice; as does the use of γ for Π, of C for E, and for X, &c.

The Parthian inscription unquestionably contains the same information as the Greek: I have not been able to satisfy myself with any lection of it: yet I think the first word of No. 1, is M L I C; and that the name Arsaces is written ARDSHOKTJ. I take them to be incorrectly copied. A question remains, whether these figures are productions of the age to which their inscription refers? It is certain they were extant prior to the insertion of their inscriptions; but they might be executed long before, yet not inscribed, till circumstances made it necessary, in the time of Arsaces. If they are merely of the time of Arsaces, do they accurately copy former (ancient) representations? Have we any figures of Belus and Moloch *on horse-back*, beside these? They are of the natural size of life. The tradition of the place refers them to Alexander and Darius. Is Arbaces the *Rustram* of the tradition? These ideas seem to coincide with their character as works of Arsaces; but what could induce him thus to ornament sepulchres near Persepolis; if *Chihelminar* were Persepolis? and what could be the state of this city, palace, &c. at the time when this monument was executed?

On the whole, this discovery of the sovereign to whom these works are attributed, leads to a suspicion whether he might not also command those other ornamental figures, still remaining at Persepolis:—their number amounts to many thousands; and they must have employed the labours of years; probably much beyond the reign of Arsaces. Or, did Alexander not burn and destroy the WHOLE palace of Persepolis? I must own, I have often wondered at this action attributed to him: drunk as he was, why fire the whole? How could he burn those parts constructed of stone? Could he so far consume this edifice, as that it might not be repaired, and restored to its royal dignity, by some succeeding prince, Arsaces, or any other? Is it unlikely that this was an ancient seat of the Persian monarchs, a palace built, perhaps, by Cyrus; partially destroyed by Alexander; restored by Arsaces; but at length deserted, through the necessity of events, and gradually mouldered to its present condition, by time and accidents? We desire materials to guide us in answering these questions; but, if they have an air of probability, that is all the proposer of them wishes at present.

.....

Mr. Morier has lately [1808] visited these, and other sculptures, repetitions of them; and has delineated several. They prove to be more numerous than had been suspected. But, it should appear, that the most correct and extensive copy of any of these inscriptions, was taken by Niebuhr. It reads, when supplied with the letters wanting, to the following effect:

ΤΟ ΠΡΟΣΩΠΟΝ ΤΟΥΤΟ ΜΑΛΑΧΝΟΥ ΘΕΟΥ
 [καί] ΠΑΠΑΚΟΥ ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΑΡΡΙΑΝΩΝ
 ΚΑΙ ΑΝΑΡΙΑΝΩΝ: ΕΚ ΤΟΝ ΨΟΥΤΣ ΘΕΩΝ
 ΜΑΛΑΧΝΟΥ ΘΕΟΥ ΑΡΤΖΑΚΟΥ ΒΑΣΙΛΕΩΣ
 ΒΑΣΙΛΕΩΝ ΑΡΙΑΝΩΝ ΕΚ ΓΕΝΟΣ ΘΕΟΝΤΙΔΩ
 ΕΚ ΤΟΝ ΨΟΥΤ ΘΕΟΥ ΠΑΠΑΚΟΥ ΒΑΣΙΛΕΩΣ

Certainly this is not classic Greek; nor can it possibly be formed into classic Greek; it is evidently a translation by a Parthian, of the Parthian inscription that accompanies it, and whatever supplements are proposed, to give it meaning, it must continue liable to exceptions as to grammar and style. However, we learn that the sculpture to which it is annexed, represents "the image of the deity Malach: [and] of Pappacus, king of kings, the Arrian, and of the Arrians: [erected to] Malach the God, by Arsaces king of kings, the Arrian; descended from Theontius, and also son of the God Pappacus, king." The leading idea of these sculptures then, is "the Deity of the country, Malachbelus, (the Persian Hercules?) conferring the sovereignty on Pappacus, or on Theontius, the grandfather, or the father, of Arsaces."

Arsaces reigned from *Ante* A. D. 254 to 217, in which period of thirty-seven years, he might not only regulate the affairs of his kingdom, but command the execution of monuments intended to impress on the remotest posterity, a sense of his gratitude to his deity, and to his progenitors; but above all, perhaps, to his brother; and therefore he *may* have consecrated them in the name of Arsaces *the first*;—but there is no need to insist on this idea, since he assumed Arsaces as his surname. The difference of terms in these inscriptions may deserve notice: one is, "*son of Theontius*;" the other is, of the race or *posterity of Theontius*." The phrase "Arrian, and of the Arrians," seems analogous to that of "a Hebrew of the Hebrews."

.....

We proceed to explain our Plate. Nos. 1, 2, 3, are delineations of the figures referred to in the foregoing letter, from Le BRUYN's Travels, Vol. ii. p. 32.

No. 1. (No. 170 of Le BRUYN) is, apparently, the subject of Mr. Flower's remarks, because he mentions *two* horses, and two heroes, *Alexander* and *Rustram*. It is impossible to determine by Mr. Flower's words, on which of the two horses either of the inscriptions is cut; all we learn is, that one inscription is cut on one horse, the other inscription on the other. In this uncertainty, presuming that the cap (as usual in the east) distinguishes the personage, the figure on the right may be the deity Moloch; and this is supported by observing, that he grasps a *club*; the same weapon as Moloch holds in the Plate to FRAGMENT, No. CVIII.; while the cap of the other figure is that worn by the Baal of the other subjects.

Moloch

Moloch has the appearance of an elderly man, with a long beard; on his head a round cap, with tall feathers in it; his left hand grasps a club, his right hand a ring, in conjunction with another figure, also on horseback. The horses of both these figures are bridled, and from the saddle of each hangs an ornamental chain, with a rose-tassel. The second figure in this subject wears a raised conical cap; his right hand grasps the ring; a servant holds over him an ensign of dignity common at Persepolis. This figure I take to be that called *Rustram*; and therefore suppose, that to him belongs the second inscription, which marks him as the deity Belus.

No. 2. A figure on horseback, probably the same deity as the second figure of Nos. 1 and 3. His left hand is on the pommel of his sword; his right hand raises up a person who has been doing him homage; a second person is in the act of supplication. The deity on horseback has a conical cap on his head, embellished with leaves at the bottom: on his thigh, under his drapery, is a somewhat—(perhaps a bow-case): his horse is handsomely bridled; and behind stands a figure almost obliterated. Traces of an inscription are on the rock.

The writer of the letter enquires whether we have any figures of Belus and Moloch on horseback, beside these? I answer, by referring to *Vaillant's Medals of the Colonies*, for two, which that eminent medallist knew not what to make of. The first is, p. 111. ranked by him as UNCERTAIN: the second is, p. 146. ascribed by him to *Olba*. The inscription on both is, *COL. IVL. AUG. OLBA-BEN.* which he reads, *Colonia Julia Augusta Olbabenorum*. [Vide No. 4.]. *Olba* was a city in Pamphylia, in this medal called a *colony*; by Strabo, *μεγαίρυνια*, “of great strength,” or well fortified [*magna munitio*. We have the same inscription given to Tyre, Josh. xix. 29. “the strong city, Tyre: *urbem munitissimum*.] The names of *Julius* and *Augustus* shew by whom it was favoured; though without this testimony we should not have known that Julius had thus privileged it. *Vaillant* says, this coin is among the most rare and most elegant. The head is Gordian. On the reverse of another medal of the same town is Bacchus. This figure is *Deus Lunus* on horseback: and I think it clear from the form and ornaments of his cap, that this is the same deity as appears on these rocks at Persepolis. If the medallist had not inserted the crescent we could not have distinguished him; but *that* proves him to be of eastern origin, and identifies him with the Persian deity.

No. 3. Baal and Moloch under another form: Baal indeed much resembles the former figures; having a strong beard, his hair flowing on his shoulders, a conical cap on his head; in his right hand he grasps a ring, in his left a—[*roll of a book*, perhaps, or short staff: apparently the same as he holds in the Plate to FRAGMENT, No. CVIII.] Behind him is an attendant. The other figure is a female; on her head a cap, with three tier of ornaments; her hair flowing over her shoulders; a necklace round her neck; a girdle round her waist. She grasps the ring with her right hand. This is the deity *Moloch*, in a female form;

form; and though attired in less warlike costume, yet is precisely the same as she appears in MISCELLANIES, Pl. II. No. 11. FRAGMENT, No. CCLXXXII. [*Vide* Nos. 6, 7, 8.] where we have Baal and Moloch in the character of warriors; and where, though a woman, she retains her reference to the male sex, by displaying a beard. This mixture of sexes in Moloch, is the origin of all the hermaphrodites, hermaphrenas, bearded-fortunes, &c. &c. in heathen mythology, and ancient art. It is the origin of all change of dresses by the sexes (in order to change the sex itself, were it possible) at the feast of *Deus Lunus*, or *Dea Luna* (*Vide* MOON, in CALMET) which is prohibited so early as Moses, Deut. xxli. 5. "The woman shall not wear that which pertaineth to a man, neither shall a man put on a woman's garment." The Hebrew of this passage, by a phraseology stronger than is adopted in our translation, prohibits the woman from wearing the distinctions of the male sex; among which, a *beard* is by appointment of nature, "what pertaineth to a man." The subject is too long and too recondite for this place: nor can we discuss the question, what is the action, and reference of these figures? Yet by way of shewing, rather than dissipating, its obscurity, it may be hinted, that the Noachic family was early divided into two parties; one called "of the Sun,"—the other, "of the Moon." These boasted of their divinity, each against the other; and to justify the superiority they vaunted, each fought for its deity: but after their fighting fever was over, they were reconciled—at least till new umbrage was taken. Is it unlikely that in No. 1. an act of union passes between Baal and Moloch; [the same in No. 3. where Moloch is a woman] signified, by their holding a ring together, as the symbol of *one-ness*, ΟΜΟΝΟΙΑ? [The same idea, precisely I gather from the action of Baal and Moloch, FRAGMENT, No. CVIII. but their arms being broken off, it is impossible to say whether they ever held a ring: their action is reciprocally that of concord.] Observe, that in these sculptures Baal has an attendant; Moloch has not: does this denote that Baal was the deity most favoured in this country? though generally, both might be honoured together; whether in conjunction, or in different parts of the same temple; or in different temples, adjacent to each other.

No. 5. The action of Baal No. 2. is illustrated by a medal of Abgarus, king of Edessa, in which he is graciously extending his hand toward his subjects. The cap on his head, and his general appearance shews, that the artists of antiquity delineated their kings as representatives of deity; which indeed was their character in the east; and undoubtedly, their early kings became their deities in later ages.

No. 6. A coin of Parthia: the king wears almost precisely such a cap as the Baal of No. 2. which renders it remarkable. The reverse has the two deities Baal and Moloch, armed, on each side of an altar: it is probable they are of different sexes.

No. 7. Baal and Moloch; manifest by the insignia of the star and the crescent:—of different sexes.

No. 8.

No. 8. The same deities, armed; the sexes intended to be distinguished; but Moloch has the beard of a man, with the breasts of a woman.

No. 9. A figure of Venus, from the Indian Zodiac: she holds as her distinctive symbol a large ring, which seems to be precisely the same as that held by the figures in Nos. 1, 3; and indeed her resemblance to the female figure of No. 3. is, by means of this ring, very striking.

No. 10. The first inscription in Persepolitan, and Greek letters; copied from the Philosophical Transactions.

No. 11. The second inscription; from the same.

When considering the subject of Succoth Benoth, **FRAGMENT, No. CCXIII.** we observed, that the word BENOS on a medal of Hierapolis, had puzzled *Vailant*: this however we referred (ultimately) to the goddess *Venus*: and it may be strongly *queried*, whether the *Olbabēn.* of No. 4. should not be read *Olba-BENOS*, as if BENOS (*Venus*) were worshipped at Olba; and as if this *Deus Lunus* were *Venus*. The crescent leads us to Moloch; Moloch is here represented as a woman; and if as a woman, why not *Venus*, the goddess of love and beauty?—How will this affect a passage or two of Scripture?

Amos v. 26. Israel when in the wilderness set up—the temporary residences of your Moloch, and of that *Chiun* [*Chiven*] you set up your images: and the star of your divinities which ye instituted to yourselves. This star appears on our medals, and denotes the sun. Supposing the crescent to belong to *Chiven*, or Moloch, it marks the queen of Heaven; “the productive powers feminine,” as Mr. PARKHURST renders Succoth Benoth. Now, that the Midianite women—the seducers, and so Israel—the seduced, paid worship to this goddess, is notorious in the open profligacy of *Zimri*, son of a chief house in Israel with *Cozbi*, [possibly a *Cusbee*, a prostitute] daughter of a prince of Midian. Numb. xxv.

1 Kings xi. “Solomon loved many strangewomen. . . who turned away his heart. . . he went after *Astoreth*, goddess of the *Zidonians*; and *Milcom* the abomination of the *Ammonites*. . . he built a high place for *Molech*, the abomination of the children of *Ammon*.” I think it clear, that *Molech* is the same as *Milcom*, bearing the same character; and that *Milcom* is a goddess of the *Ammonites*, no less than *Ashtoreth*, with whom she is associated, is goddess of the *Zidonians*. By female deities the heart of Solomon was turned. *Ashtoreth* and *Molech* were much the same divinity.

1 Kings xxi. If *Ashtoreth* and *Molech* be taken as the same deity, it leads to the toleration at least of an idea not commonly entertained on the history of Naboth. Ahab, king of Israel, married *Jezabel* a princess of the *Zidonians*. Moreover, Ahab built an altar, and temple for *Baal*, chap. xvi. 33. He also made a grove rather (literally) an *Ashreh* or *Ashtaroth*, either a shrine, or figure, or both; the goddess which *Jezabel* had been used to worship at *Zidon*. This *Ashreh*, may be a Syrian name for what the Hebrews called *Molech*, the king. The history reports that Naboth was a worshipper of *Jehovah*; consequently

quently was obnoxious, like Elijah, to the wrath of Jezabel; and when he pleads the laws of Jehovah against Ahab, verse 3. Jezabel directs the men of his city to *proclaim a fast*:—set Naboth at the head of the solemnity, who will act his part with a very ill grace; and let two witnesses watch his actions. . . . *They proclaimed a fast; and made Naboth to sit at the head of the people: and there came into the assembly, as if accidentally, two low men, sons of Belial, and sat down over against him, so as to see his deportment; and they witnessed against him, saying, Naboth does now blaspheme* [bid farewell to—take leave of—quit, as if forsaking the worship of] *the gods, even Molech.* Naboth could not deny this charge; so they took him, and stoned him, &c.” Naboth therefore fell a martyr to his religion; and for this reason apparently, Jezabel, who had procured his death, is immediately threatened with punishment;—“the dogs shall devour her, &c.”

There are other passages in which these deities, Baal and Moloch, are considered as being of either sex, or of both sexes. The first indeed is more easily proved from Scripture, than the latter; though the latter occurs often in profane antiquity, and perhaps, occasionally in Scripture also.

BAAL PEOR (Numb. xxv. 3.) is certainly Baal with the distinctive marks of the female sex; to this agrees the impurities of his worship. *Vide* also Hosea x. 10. where the *Chiven* of the passage in Numbers is described as “that *shame* ;” under a *feminine* word. It should seem also, as if idolatry were called *fornication*, because *fornication* was an attendant on idolatry; and no wonder, as the double, or the united, sexes, of the idols, contributed to promote that crime in their worshippers; certainly, not less than when a figure of either sex was the object of their adoration, as in Judges ii. 13. iii. 7. vi. 28. x. 6. 2 Kings xvii. 16. xxi. 3, &c. From these passages it may be inferred that *Ashreh*, or *Ashteroth*, was the female companion of *Baal*. The same apparently is *Merodach*, *Nebo*, and others. These latter titles I propose partly to examine.

Merodach is mentioned in that curious passage, Jer. l. 2 “Bel is confounded, Merodach is broken in pieces: her idols are confounded: her images are broken in pieces.” The rendering of the LXX. is extremely remarkable. “Is abashed (deeply blushes) Bel, the fearless; the *delicate* Merodach is given up.” It is clear, by their epithet the *delicate*, that they considered Merodach as a goddess; yet Mr. PARKHURST derives this title from a root signifying *to break in pieces*; however, our subject shews that these ideas are very compatible; for though in some of our medals, this goddess be armed in a manner truly formidable, yet she is delicate in other respects. Moreover, this may suggest the true sense of the Hebrew words. “Bel is abashed, timid; Merodach is divided—dismayed—overcome with trepidation. Her female labours are abashed; her [ludicrous] female idols are confounded.” Here as it should seem, the characters of the female sex are attributed to *Bel*; the words “idols,” and “labour,” have the *feminine* form, although their relation to Bel be no less apparent than to Merodach. The prophet seems to employ equivocal terms throughout; and especially

especially to play on the word *idols*; which should be “*gods*,” *alilim*—for which the text reads *galilim*, excrementitious deities.

Perhaps this correlation is still stronger in the title *Nebo*, or *Nebu*: for it deserves remark, that the king called in Scripture, *NEBUCHADNEZZAR*, is known throughout the East, under the title of *BALCHNAZZAR*: so that *Nebu* and *Bel* are in this instance interchangeable. Nor is this all; for the female bashfulness here attributed to *Bel*, may perhaps justify us in attributing other *femalities* to this deity: for which consult Isaiah xlv. 1. a passage hitherto unintelligible, because translators have not adverted to the attitude of women during delivery, in the East, which is—standing, leaning forward, over a bed, or &c. Literally, the words are—*Bel croucheth the knees; Nebu bends the back; their labours were equal to animals; even to great animals, their burdens were suspended; the bearing was to palpitation* (or extreme lassitude.) *They have bent their backs; they have crouched their knees, in union; they were unable to deliver the burden; but* [even—INSOMUCH THAT, M.S.] *their own lives in turning* [straining] *went forth.*” Observe how this sense of the passage is established by the antithesis following. “*Hearken unto me, O house of Jacob, and all the remnant of the house of Israel; borne (by me) from the belly; carried (by me) from the womb: and even to old age I am that person; and even to the turn of life* [grey hairs, Eng. Tr.] *I will carry you. I have made you, as children are made; and I will bear you, as children are borne; even I will carry you, as children are carried; and will deliver you, as children are delivered.*” This prophet frequently employs a repetition of words allied in sound, but varied in sense: hence the neatness of his turn of words is extremely difficult to preserve, in translation. In this passage he *repeats* several words:—for instance [the figures mark the verses, respectively.]

- | | | | | |
|--------------|------------|-------------|-------------|--------------|
| 1. Omusiuth. | 2. Shebi. | 1. Neshati. | 1. Nesha. | 2. Meleth. |
| 3. Omusim. | 4. Shebeh. | 3. Neshaim. | 3. m-Nesha. | 4. a-Meleth. |

Surely this echo of words demonstrates the connection of the verses with each other; and, as all interpreters agree in the rendering of the latter verses, it justifies an endeavour to annex such a sense to the former verses, as maintains their antithetical correspondence with their fellows. This sense, too, coincides with the import of other passages of Scripture, as above explained, and corroborates the proposition, that the offices and peculiarities of the female sex are attributed to *Baal*, as well as to *Moloch*, who, if *she* be sometimes a man, *he* is sometimes a woman; pregnant, says the prophet, but to no issue; and suffering the pains of labour, but to no delivery.

It is highly credible that there are in Scripture other female deities, which ultimately terminate in *Moloch*:—*Baal Gad*, Josh. xi. 17.—*Baal Shalisha*, [Vide the three busts in the temple of Elephanta.]—*Huzzab*, Nahum ii. 7.—*et. al.* To investigate these would extend the subject to an inconvenient length. I therefore conclude, by referring to similar figures with those at Persepolis, male and female, cut in rocks, fifty cubits high—extant near *Balk* and *Bamyan*, in the extreme east of Persia. Vide HYDE, *de Relig. Pers.* p. 132. or Asiatic Researches, Vol. vi. p. 465. Lond. Edit. One is called the *red* idol, and the other the *grey* idol: of which colours they appear to have been painted. They are extremely ancient; perhaps the nearest to the original idols of mankind, of any now remaining in the world: under which notion we cannot but desire further information respecting them, as they assist in ascertaining the nature, if not also the origin, of idolatry—that gangrene which overspread both east and west.



MATERNAL MOURNING at RAMAH.

MOURNING OF THE WOMEN AT RAMAH, OVER THE GRAVES OF THEIR CHILDREN.

EXTRACT, TRANSLATED FROM LE BRUYN'S VOYAGE IN SYRIA, p. 256.

"We have formerly described the great mournings of the women of Turkey, on account of the deaths of their Husbands and relations. This custom is not so peculiar to them, but what we find it also among other Orientals, as well Maronites as Cophtes, and the other Christian sects. *The women go in companies, on certain days, out of the towns to the tombs of their relations, IN ORDER TO WEEP THERE; and when they are arrived, they display very deep expressions of grief.*

"While I was at Rama, I saw a very great company of these weeping women, who *went out of the town.* I followed them, and after having observed the place they visited, adjacent to their sepulchres, in order to make their usual lamentations, I seated myself on an elevated spot, from whence I designed the annexed plate. They first went and placed themselves on the sepulchres, and *wept there;* where, after having remained about half an hour, some of them rose up, and formed a ring, holding each other

MATTHEW ii. 18.

other by the hands, as is done in some country dances. Quickly two of them quitted the others, and placed themselves in the center of the ring; where they made so much noise in screaming, and in clapping their hands, as together with their various contorsions, might have subjected them to the suspicion of madness. After that, they returned and seated themselves *to weep again*; till they gradually withdrew to their homes. The dresses they wore were such as they generally used, white, or any other colour; but when they rose up to form a circle together, *they put on a BLACK VEIL*, over the upper parts of their persons, as is endeavoured to be shewn in the plate."

—[This was at *Ramah*, between Joppa and Jerusalem, near Lydda.]

This seems to be the remains of a custom observed in ancient times. We read of Mary's supposed, "*going to the grave to weep there*," John xi. 31.—of "*weeping with howling*," Isaiah xv. 3.—of "*the noise of weeping equalling the noise of joy*," Ezra iii. 13. and of other expressions of public and ceremonious weeping, even so early as the days of Abraham, Gen. xxiii. 2. and Moses, Deut. xxxiv. 8. The present, however, is not an opportunity to discuss the mode of weeping, so much as the place of it. Mountains seem to have been the usual places for conspicuous weeping and lamentation: so we read, Isaiah xv. 2. "*he is gone up to the high places to weep*," whether hills, or temples upon them: and Jer. iii. 23. "*A voice was heard on the high places, weeping*"—also chap. xlviii. 5. "*in the going up of Luhith continual weeping shall go up*." *et al.* We see this custom continued in the extract before us, and I think it may illustrate the metaphor of "*Rachel weeping for her children, and refusing to be comforted, because they are not*." I rather suggest this, because, the Jews insist [and Mr. LEVI, lately] that Rachel is very ill introduced by the evangelist Matthew in reference to the children slain by order of Herod at Bethlehem. They say, that the lamentation of Rachel referring only to the carrying away of captives to Babylon, and being connected with a promise of their return, it is not of that desperate description to justify the application of it by the evangelist. The passage stands thus, Jer. xxxi. 15.

Thus saith the LORD:

A voice was heard in Ramah,
Lamentation and bitter weeping;
Rachel weeping for her children,
Refused to be comforted, because they were not.

Thus saith the Lord:

Refrain thy voice from weeping,
And thine eyes from tears:
For thy work shall be rewarded, saith the LORD:
And they shall come again from the land of the enemy.
And there is hope in thine end, saith the LORD,
That thy children shall come again to their own border.

Certainly

Certainly this passage closes with hopeful and grateful ideas, so far, therefore, as the prophet apostrophizes the tender Mother of the tribes of Joseph and Benjamin, he addresses consolation to her: not so the evangelist; whose metaphorical Rachel deplores her children hopelessly cut off, and departed for ever.

I would wish therefore, to state, on the authority of LE BRUYN, 1.—that it is customary for Mothers in the East to seek the graves of their deceased children, in order to weep over them; meaning to infer, that this being a custom in the East at present, it was the same anciently; so that in point of lamentation, *any* mourning mother might have answered the allusion of the evangelist as well as Rachel.

2. That, it is probable, the high places or hills out of the towns, were usually the scenes of such lamentations, anciently; as we find by passages already quoted;—and that such *weepings* are now maintained in the same places: the same customs for the most part prevailing in modern as in ancient times.

3. That, the word *Ramah* signifies high places in general; and that *any* high place, the usual scene of such maternal lamentation, would have answered the evangelist's purpose, in reference to mourning mothers.

4. That Rachel was buried at, or near, Ramah, Gen. xxxv. 9. xlvii. 7. 1 Sam. x. 2. where the Israelites were assembled to be carried into captivity, Jer. xl. 1. This was not the *Ramah* mentioned by LE BRUYN; which is near Lydda: the prophet's *Ramah* is near Bethlehem.

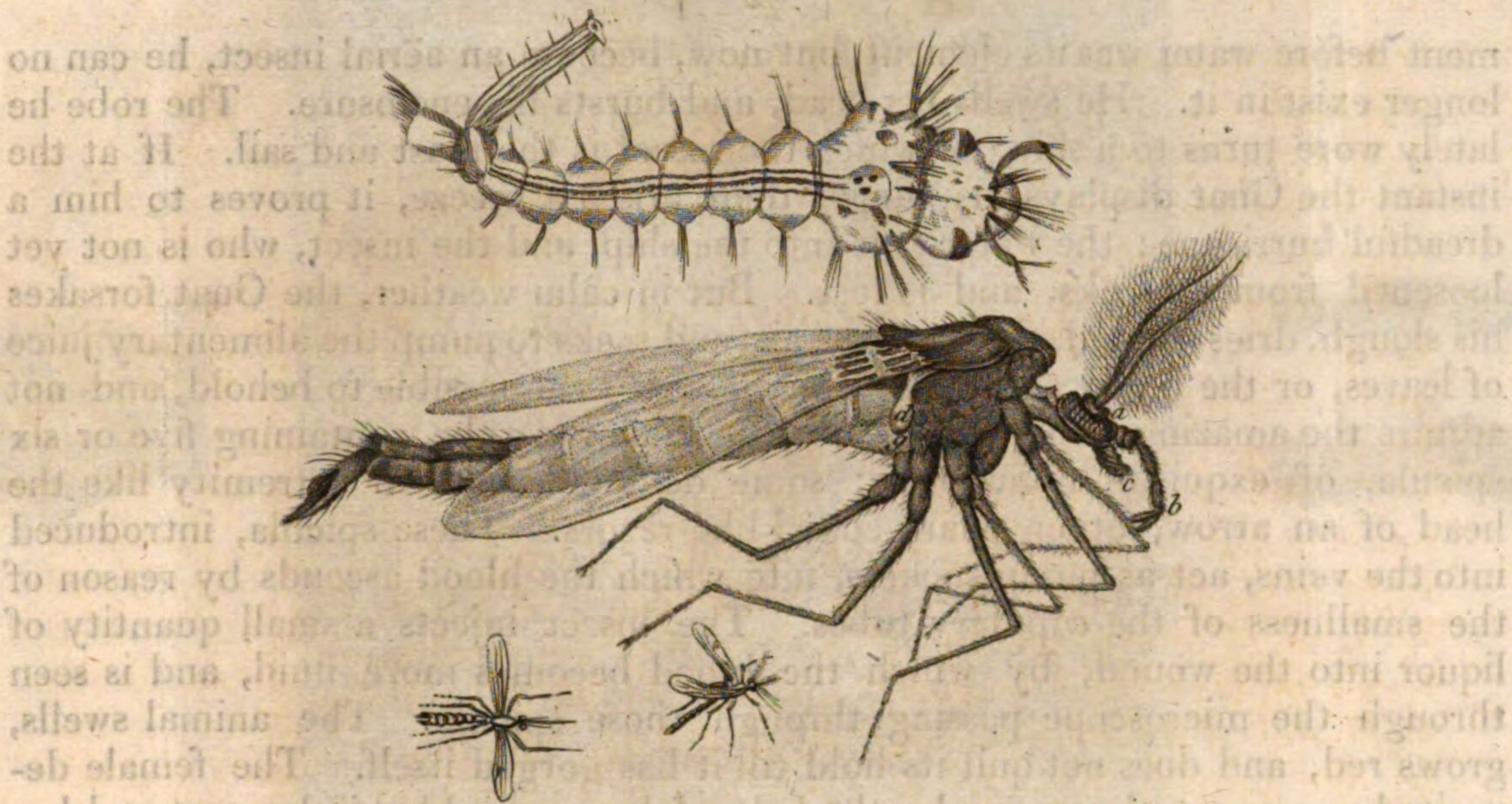
5. That the same custom of women's weeping for their children was probably maintained in the evangelist's time at Ramah near Bethlehem, as LE BRUYN found at Ramah near Lydda; *that* Ramah being a high place fit for similar purposes, and such high places being selected as proper for maternal lamentations. It will appear, therefore, that there is nothing forced or constrained in the reference of St. Matthew, chap. ii. 18, to a mourning of mothers over their children, and refusing to be comforted, since such was [as it still is] the custom of the country. The allusion to such a custom would be still more conspicuous, if it was [as I doubt not it was] maintained at *Rachel's* Ramah; and the apostrophe to Rachel would be still more impressive, if these mournings were exhibited in an open and high place or spot of ground adjacent to where she was buried. It requires little poetic vigour to call such mournings, the mournings of Rachel: not to say that such a name might actually be given to them, from the place in which they were performed.

These remarks set in a very easy light the *accommodation* employed by the evangelist; who, certainly, selects Rachel as a mother of the most affectionate character; and instances in her that grief which other mothers felt, and under which other mothers lamented. This seems to justify also, the expression of the evangelist, "then was *fulfilled* the language of Jeremiah the prophet;" for
if

if Rachel lamented, according to the custom of the country, on account of the departure of her children into captivity; if when they were not slain, but only *deported*, she was, as it were, raised by the impulse of poesy, out of her tomb, to grieve, to lead the lamentations of the weeping mothers; surely when her children were *really slain* she might well break the bonds of silence, and express by loud and bitter cries, those agonies which rent her sympathetic bosom: she might preside over the sorrows, the public sorrows, which such an occasion demanded, and which, after such privations, were expected to be demonstrated according to established usage. In short, if the prophet had any right to raise the dead, on account of a circumstance of temporary, but not hopeless distress, the evangelist had, at least, equal, not to say greater, right to do the same, on occasion of a slaughter, which was neither alleviated by hope of return, nor by possibility of future restoration; but was the fatal result of tyrannical jealousy, and of vindictive anticipation. This was a *fulfilment* of the allusion and intent of Jeremiah, *much beyond* that marked by the prophet himself; it was a *deeper* completion of his words; a more entire termination of his sentiment; founded, like his, on the custom of the country, and, like his, supported by the daily occurrences of time, and place, and by the general manners of the persons to whom his narration was addressed.

To conclude, we are justified by the continued usages of the country, in assuming—that the mothers of the infants slaughtered at Bethlehem did actually visit their tombs, and lament with loud exclamations over the remains of their tenderly beloved offspring. Admitting this fact, where is the harshness of imagining, that the mother of the adjacent tribe, though long since deposited in the silent tomb, should be recalled to life, by the poetical imagination of the prophet, to partake in the distress of her daughters deprived of their children?—and if this be permitted to the prophet, on what principle shall it be refused to the evangelist, whose application of it is, at least, equally expressive, direct, and proper?

It is impossible to place any dependance on the antiquity of the tomb now shewn as that of Rachel, near Bethlehem. It stands within six or seven paces of the field of Ephrata: about forty paces out of the high road. On a hill a little further on, to the right, are ruins of a tower and houses; “They told us,” says D’Arvieux, “that they were the remains of the little town of *Ramah*, of which Jeremiah speaks in his “*Lamentations*,” and *where Herod caused the innocent babes to be slain*; as also in the neighbourhood.” If this tradition be correct—(and the evangelist’s words rather support it)—then the poetical resuscitation of Rachel, has a closer alliance with truth, than has usually been imagined.



THE GNAT.

WE have ventured to differ from our translators in the only place where they use the word *Gnat*, Matth. xxii. 24. by introducing another insect, more immediately referable to the subject there intended; and we have, in conformity to the lxx. Wisdom, Philo, Origen, and Jerom, ventured to think, the plague they translate of *lice*, Exod. viii. 16. might rather be of *Gnats*. It will be remarked, *in loc.* that we have referred these miracles to the water, and to the air; *Gnats* would be a mixture of both. BARBUT says of these creatures, "Before they turn to flying insects, they have been in some manner fishes, under two different forms. We observe in stagnating waters, from the beginning of May till winter, small grubs, with their heads downwards, their hinder-parts on the surface of the water; from which part arises sideways a kind of vent-hole, or small hollow tube, like a funnel, and this is the organ of respiration. The head is armed with hooks, that serve to seize insects and bits of grass, on which it feeds. On the sides are placed four small fins, by the help of which the insect swims about, and dives to the bottom. These larvæ retain their form during a fortnight or three weeks, after which period they turn to chrysalids. All the parts of the winged insect are distinguishable through the outward robe that shrouds them. The chrysalids are rolled up into spirals. The situation and shape of the wind-pipe is then altered, it consists of two tubes, near the head, which occupy the place of the stigmata, through which the winged insect is one day to breathe. After three or four days strict fasting, they pass to the state of Gnats. A moment

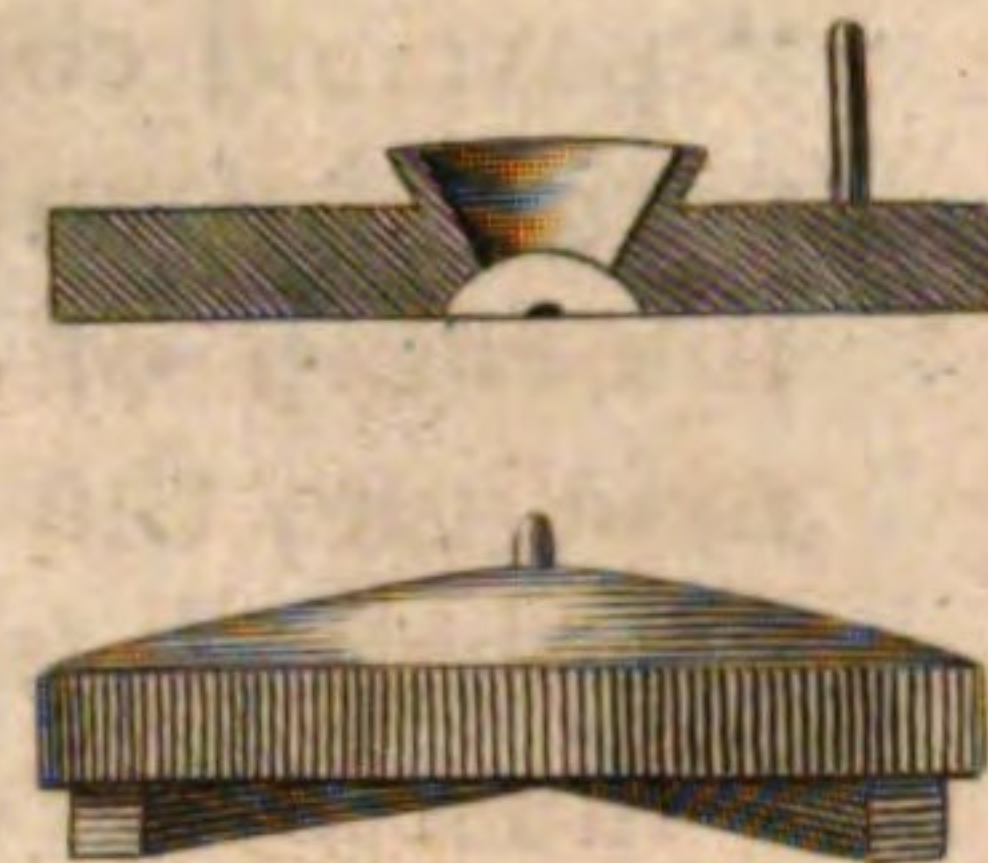
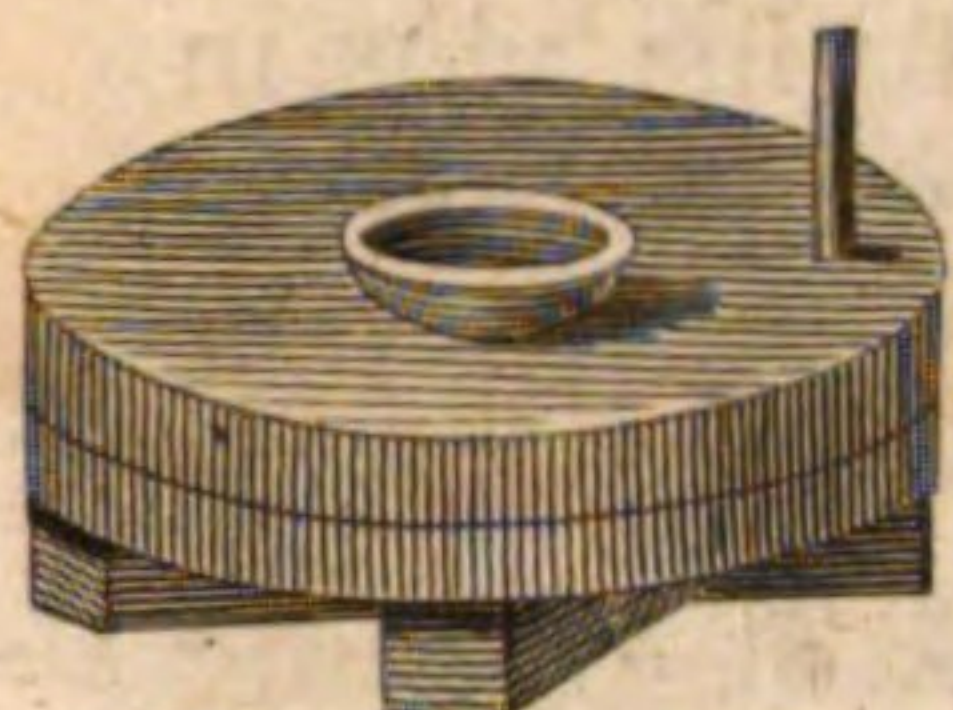
ment before water was its element, but now, become an aërial insect, he can no longer exist in it. He swells his head, and bursts his enclosure. The robe he lately wore turns to a ship, of which the insect is the mast and sail. If at the instant the Gnat displays his wings, there arises a breeze, it proves to him a dreadful hurricane: the water gets into the ship, and the insect, who is not yet loosened from it, sinks, and is lost. But in calm weather, the Gnat forsakes his slough, dries himself, flies into the air, and seeks to pump the alimentary juice of leaves, or the blood of man and beasts. It is impossible to behold, and not admire the amazing structure of its sting, which is a tube, containing five or six spicula, of exquisite minuteness; some dentated at their extremity like the head of an arrow, others sharp-edged like razors. These spicula, introduced into the veins, act as pump-suckers, into which the blood ascends by reason of the smallness of the capillary tubes. The insect injects a small quantity of liquor into the wound, by which the blood becomes more fluid, and is seen through the microscope passing through those spicula. The animal swells, grows red, and does not quit its hold till it has gorged itself. The female deposits her eggs on the water, by the help of her moveable hinder part and her legs, placing them one by the side of another, in the form of a little boat. This vessel, composed of two or three hundred eggs, swims on the water for two or three days, after which they are hatched. If storms arise, the boats are sunk. Every month there is a fresh progeny of these insects. Were they not devoured by swallows, by other birds, and by several carnivorous insects, the air would be darkened by them. Gnats, in this country, however troublesome, do not bite so severely, as the musketo-flies of foreign parts. Both by day and night these insects enter houses, and when people are in bed, and would sleep, they begin their disagreeable humming noise, by degrees approach the bed, and often fill themselves with blood, sucked from the suffering sleeper. Their bite causes blisters in people of any delicacy. Cold weather diminishes their activity, but after rain they gather in quantities truly astonishing. In the great heats of summer, the air seems to be full of them. In some places the inhabitants make fire before their houses, to expel these troublesome guests. Nevertheless, they accompany the cattle when driven home; and they enter in swarms wherever they can."

The reader will judge from these representations, whether the *Gnat* does not bid fair to be the Hebrew *cinnim*: being winged, it would spread over a district or a country, with equal ease as over a village or a city, and would be equally terrible to cattle as to men. It seems also to precede the *dog-fly* with great propriety.

It should be added, that the *Gnat* is thought to undergo several transformations; being, 1. a worm; 2. a nymph; 3. an aurelia; 4. a Gnat. It abounds not in great rivers, but in ditches, ponds, and repositories of water. Moses, therefore, did not strike the river, (the Nile) but *clods* of earth, as the word rendered *dust* may be understood. See Prov. viii. 26.; Job xii. 24., &c.

Our plate represents the male and female Gnat of the natural size; together with the male or brush-horned Gnat, and the nymph, greatly magnified.

WOM



HAND-MILL or QUERN.

MILL, OR QUERN, FOR GRINDING CORN.

MATTHEW, CHAPTER XXIV. VERSE 41.

THE following extracts are from that intelligent traveller, Mr. PENNANT. Consequently, I need say nothing in support of their correctness or their authenticity.

At *Kinloch Leven*. "Saw here a *quern*, a sort of portable mill, made of two stones, about two feet broad, thin at the edges, and a little thicker in the middle. In the centre of the upper stone is a hole to pour in the corn, and a peg by way of handle. The whole is placed on a cloth; the grinder pours the corn into the hole with one hand, and with the other turns round the upper stone with a very rapid motion, while the meal runs out at the sides on the cloth. This is rather preserved as a curiosity, being much out of use at present. Such are supposed to be the same with what are common among the *Moors*, being the simple substitute of a mill." *Tour in Scotland*, 1769, p. 231.

In the *Isle of Rum*, or *Ronin*. "Notwithstanding this island has several streams, here is not a single mill; all the molinary operations are done at home; the corn is *graddan'd*, or burnt out of the ear, instead of being thrashed: this is,

MATTHEW, CHAP. XXIV. VERSE 41.

performed

performed two ways; first, by cutting off the ears, and drying them in a kiln, then setting fire to them on a floor, and picking out the grains, by this operation rendered as black as coal. The other method is more expeditious, for the whole sheaf is burnt, without the trouble of cutting off the ears; a most ruinous practice, as it destroys both thatch and manure, and on that account has been wisely prohibited in some of the islands. *Gradanned* corn was the "parched corn" of HOLY WRIT. Thus *Boaz* presents his beloved *Ruth* with parched corn; and *Jesse* sends *David* with an *ephah* of the same to his sons in the camp of *Saul*. The grinding was also performed by the same sort of machine, the quern, in which two women were necessarily employed. Thus it is prophesied, *two women shall be grinding at the mill, one shall be taken, the other left*. I must observe, too, that the island lasses are as merry at their work of grinding the *graddan*, the *κακρος* of the ancients, as those of *Greece* were in the days of *Aristophanes*,

Who warbled as they ground their parched corn.

NUBES, Act v. Scene II.

[*Graddan* is derived from *Grad*, quick, as the process is so expeditious.]

"The *quern* or *bra* is made in some of the neighbouring counties, in the main-land, and costs about fourteen shillings. This method of grinding is very tedious; for it employs two pair of hands four hours to grind only a single bushel of corn. Instead of a hair sieve to sift the meal, the inhabitants here have an ingenious substitute, a sheep's skin stretched round a hoop, and perforated with small holes made with a hot iron. They knead their bannock with water only, and bake, or rather toast it, by laying it upright against a stone placed near the fire." *Tour to the Hebrides*, 1772. Part I. pages 321, 322.

In the *Isle of Skie*. "On my return am entertained with a rehearsal, I may call it, of the *luagh*, or, *walking of cloth*, a substitute for the fulling-mill. Twelve or fourteen women, divided into two equal numbers, sit down on each side of a long board, ribbed lengthways, placing the cloth on it. First, they begin to work it backwards and forwards with their hands, singing at the same time, as at the *quern*: when they have tired their hands, every female uses her feet for the same purpose, and six or seven pair of naked feet are in the most violent agitation, working one against the other; as by this time they grow very earnest in their labours, the fury of the song rises; at length it arrives to such a pitch, that, without breach of charity, you would imagine a troop of female demoniacs to have been assembled.

"They sing in the same manner when they are cutting down the corn, when thirty or forty join in chorus, keeping time to the sound of a bagpipe, as the *Grecian* lasses were wont to do to that of a lyre during vintage in the days of *Homer*. (*Iliad*, xviii. line 570.) The subject of the songs at the *luaghadh*, the *quern*, and on this occasion, are sometimes love, sometimes panegyric, and often a rehearsal of the deeds of the ancient heroes, but commonly all the tunes slow and melancholy.

"Singing

"Singing at the *quern* is now almost out of date since the introduction of water-mills. The laird can oblige his tenants, as in *England*, to make use of this more expeditious kind of grinding; and empowers his miller to search out and break any *querns* he can find, as machines that defraud him of the toll. Many centuries past, the legislature attempted to discourage these awkward mills, so prejudicial to the landlords, who had been at the expence of others. In 1284, in the time of *Alexander III.* it was provided, that 'na man sall presume 'to grind *quheit, maishloch*, or rye, with hand mylne, except he be compelled 'by storm, or be in lack of mills quhilk sould grind the samen. And in this case, 'gif a man grindes at hand mylnes, he sal gif the threttein measure as multer: 'and gif anie man contraveins this our prohibition, he sall tine his hand 'mylnes perpetuallie.' *Idem*, pages 327, 328.

These extracts offer abundant matter for our consideration.

1. As to these instruments of domestic employment being found at present in the remote parts of Scotland:—What nation first imported them there? Are they of remote antiquity?—of the Scythian tribes?—of Druidical usage? I incline to think, that many articles of Druidical use are to be found in different parts of our island, by accurate observation; many customs, and peculiarities of our country *establishments*, which pass for good Christian piety, to mere current attention. And why not? When nature or necessity commands such customs why should Christianity abrogate them? Was Religion intended to supersede nature and necessity? or to change civil and familiar manners? It might regulate and improve them; but those which were laudable before the times of Christianity, are laudable still; and "against such," we may say with the apostle, very justly, "there is no law."

2. This representation furnishes a more correct notion of the application of our Lord's expression, Matth. xxiv. 41. "*Two men shall be at work in the field one shall be taken, and the other left: two women grinding at the mill—*" It appears in FRAGMENT, No. cix. page 15, that I supposed these two women to be grinding "*in an apartment*" of a house; but, from Mr. PENNANT's representation, it is clear, that these women might be grinding *out of doors*; consequently, they form an exact parallel to the men at work *in the field*: both sexes were employed in their customary labour. We see, also, that these *querns* are worked by two women, for speed and for cheerfulness; as singing forms part of the *activity* they demand, *i. e.* to cheer, I had almost said to *cheat*, the labour by vocal amusement. How *close*, how *accurate*! must that providence come which takes one of the women in our plate, yet leaves the other!

3. This print adds to the correctness of the prophetic description of the degraded daughter of Babylon, Isaiah, xlvii. 1. "*Sit in the dust, on the ground:*" (so our women sit on the earth;) very differently from the attitude and accompaniments of sitting on a throne—"there is no chair for thee:" [Vide FRAGMENTS, No. xii.]—but lament instead of singing. It adds, too, to the

the *publicity* of the disgrace of Samson, who was made "grinder of corn for the public prison," and was set, we need not doubt, in a public, open, exposed place, where all the world might see him, and any passenger might taunt him—"There, that's the famous Samson!"—a proper preparative for his public exhibition of feats of strength, on the festival—the anniversary festival, of Dagon.

4. I would query, also, whether the expression "sound of the millstone," Rev. xviii. 24. must *necessarily* import the rattle of the mill itself:—may it mean the voice of the singing which accompanies grinding? for it seems pretty clear, by Mr. PENNANT's narration, that the voice of the grinders is heard much above and beyond that of the mill, when "the fury of the song rises—to such a pitch—as you would imagine a troop of "female demoniacs" might scream it.

5. The *parched corn* described by Mr. PENNANT, and the manner of parching it, are not merely amusing; they also are instructive; they will remind the reader of many passages in Scripture, where parched corn is mentioned; and the different manners of parching it will not escape his notice. Indeed, I would not be certain whether this very distinction is not made by the use of different words in the Hebrew original. So we read, Lev. xxiii. 14. "And 1. bread, and 2. (קלי KALI) parched corn; and 3. (רמל CARMEL) "green ears," says our translation, "ye shall not eat." Now this very word *carmel* appears to be derived from כרם *carm*, to cut off, and מל *mel*, to fill; from whence it signifies full ears of corn cut off from the stalk. Lev. ii. 14. "Thou shalt offer for thy first fruits green ears of corn dried by the fire, even [rather, and] corn beaten out of full ears," *carmel*. Now, why are these *carmel* put *after* the corn dried by the fire in these passages, unless they also had undergone the action of parching? Had they been in their natural state, they ought to have come *before* that which is mentioned as having been *dressed*; but by being placed *after* it, they seem to be assimilated to it, and, as it were, ranged under it. Consider, also, 2 Kings, iv. 42. "A man brought twenty loaves of barley, and full ears, in the husk thereof." Had he not ["kiln-dried"] parched this corn before he brought it? whereby he had rendered it fit for immediate use, yet had not beat it out of its husks, wherein, probably, it was fitter for *carriage* or for *keeping*, during the conveyance of it. At any rate, as it was ordered to be "set before the people," and eat directly, it should seem that it was in a state fit for eating, which could be no other than parched, to answer the circumstances of the story; though it is true there might be, and there probably were, other modes or degrees of parching, as well corn as other grain. It is pleasing to observe the precision and accuracy of Scripture words, which certainly were not used *originally* without a correct meaning, and a specific application to their subject; whether, or not, it be now perceived.



WEDDING PROCESSION in PERSIA.



WEDDING PROCESSION in INDIA.

The first thing that strikes the eye is the great number of people who are present. They are all dressed in the most elegant manner, and the atmosphere is one of the most refined and polished that can be imagined. The music is soft and sweet, and the dancing is graceful and elegant. The food is delicious and the service is perfect. The night is a perfect example of the most refined and polished society that can be imagined.

Immediately behind the patroness of the evening, a large number of people are seated, whose business is to receive the guests. They are all dressed in the most elegant manner, and the atmosphere is one of the most refined and polished that can be imagined. The music is soft and sweet, and the dancing is graceful and elegant. The food is delicious and the service is perfect. The night is a perfect example of the most refined and polished society that can be imagined.

The new married couple go down to the ballroom, for the space of some hours, after which they return to their own room, where the waiter and doorman wait for them. The whole house is illuminated with little lamps, and many of these lamps are already extinguished, and are kept ready for their arrival. The sides these that accompany them, and so better than any other.

This sort of lights are nothing new, but many people of old have acquired them against one another, in a round table, and the other side of the table is a mirror of copper. Those who hold them in one hand, and in the other a bowl of the same metal, with the mouth of copper, which is full of oil, and they take care to pour out of it, from time to time, upon the lamp, which will give us light.

When the bridegroom and the bride are come into the room, the rest of the company are all seated at the table, and the waiter and doorman wait for them.



WEDDING PROCESSIONS.

THE lower figure on this plate is copied from a little book of an anonymous author, which "compares the Customs of the East-Indians and the Jews;" published 1705. We shall quote his explanation of this representation:

"St. Matthew relates a parable, which I think may be explained by a ceremony of the Indians. Speaking of the five foolish virgins, who never thought of getting oil, till the Bridegroom was ready to come in, he tells us, "*At midnight there was a great cry made, Behold, the Bridegroom cometh, go ye out to meet him.*" Matth. xxv. 6.

"It appears to be scarcely agreeable to our customs, that a man should go out on his marriage-night, and not return to his house till midnight; and therefore it may be asked, whether there was any law that obliged him to do after this manner, since he arrived in great ceremony at his house, where the women were ready with lamps to go out and meet him, and a feast was prepared for him.

"'Tis not difficult to answer this question, if we do it agreeably to the customs of the Indians; for on the day of their marriage, the husband and wife being both in the same *palki*, or *palanquin*, (which is the ordinary way of carriage in the country, and is carried by four men upon their shoulders,) go out between seven and eight o'clock at night, accompanied with all their kindred and friends. The trumpets and drums go before them; and they are lighted by a number of *massals*, which are a kind of flambeaux, the make whereof I shall quickly explain.

"Immediately behind the *palanquin* of the new-married couple, walk many women, whose business is to sing verses, wherein they wish them all kind of prosperity, as the Greeks and Romans formerly used to do in their epithalamiums.

"I believe it is of these publick singers that the Scripture speaks, when it says in the last chapter of Ecclesiastes, ver. 4. *And all the daughters of musick shall be brought low*; intending by that to give us one sign of a publick desolation. The royal prophet also mentions this sort of women, and calls them *juvenalis tympanistrias*. Psalm lxvii. 26.

"The new-married couple go abroad in this equipage, for the space of some hours, after which they return to their own house, where the women and domestics wait for them. The whole house is enlightened with little lamps; and many of these *massals* already mentioned, are kept ready for their arrival, besides those that accompany them, and go before their palanquin.

"This sort of lights are nothing else but many pieces of old linen, squeezed hard against one another, in a round figure, and forcibly thrust down into a mould of copper. Those who hold them in one hand, *have in the other a bottle of the same metal, with the mould of copper, which is full of oyl, and they take care to pour out of it, from time to time, upon the linen, which otherwise gives no light.*

"When the bridegroom and the bride are come into the house, the wife retires

tires with the women, and the husband sits down with his friends upon tapistry or matrasses, where their meat is served up to them. The company is always very numerous; and I doubt if among the Greeks there were so many bride-maids as there are among the Indians.

“The parable in the Gospel appears plainly to have relation to this custom; and perhaps the Jews, at least in the days of Jesus Christ, used some ceremony that came near it, without which I cannot see that a clear explication can be given of this return of the spouse at midnight, and the feast that followed immediately after his arrival: and yet those who have written of the Jewish traditions, have said nothing of it.

“It may very well be, that Christ fetched this example from other nations which were near Judea, whose customs and ceremonies the Jews might know.

“It were vain to allege that this is only a parable; for all those which our Saviour made use of, were founded either upon the customs of the Jews, or of the other nations that lay near to Palestine.

We shall add to this, extracts from travellers, who give account of countries not so distant from Judea as India is: they confirm many of the above particulars, and corroborate the whole. The first is from THEVENOT, in Persia.

“Whilst I was at *Surat*, the governor of the town, married his daughter, to the son of an *Omra*, who came thither for that end. That young lord made his trumpets, tymbals, and drums play publicly during twelve or fourteen days, to entertain the people, and publish his marriage. On a Wednesday, which was appointed for the ceremony of the wedding, he made the usual cavalcade, about eight o'clock at night. First, marched his standards, which were followed by several hundreds of men, carrying torches: these torches were made of *bamboos*, or cane, at the end whereof was an *iron candlestick*, containing rolls of oiled cloth, made like sausages. Among these torch-lights, were two hundred men, women, little boys, and little girls, who had each of them upon their head a little hurdle of ozier twigs, on which were five little earthen cruses, that served for candlesticks to so many wax candles. These people were accompanied with a great many others; some carrying baskets, rolls of cloth, and oil to supply the *flambeaux*, and others carrying candles.

“The trumpets came after the flambeaux-carriers; and these were followed by public dancing-women, sitting in two machines, made like bedsteads without posts, in the manner of *palanquins*, which several men carried on their shoulders. They sung, and played on their cymbals, intermingled with plates, and flat thin pieces of copper, which they struck one against another, and made a very clear sound, but unpleasant, if compared with the sound of our instruments. Next came six pretty handsome led horses, with cloth saddles, wrought with gold-thread.

“The bridegroom, having his face covered with a gold fringe, which hung down from a kind of mitre, that he wore on his head, followed on horseback; and after came twelve horsemen, who had behind them two great elephants, and

and two camels, which carried each two men, playing on tymbals; and besides these men, each elephant had his guide, sitting upon his neck. This cavalcade, having for the space of two hours marched through the town, passed at length before the governor's house; where they continued, as they had done all along the streets where the cavalcade went, to throw fire-works for some time, and then the bridegroom retired.

"Sometime after, bonfires, prepared on the river-side, before the governor's house, were kindled; and on the water, before the castle, there were six barks, full of lamps burning in tiers. About half an hour after ten, these barks drew near the house, the better to light the river; and then at the same time, on the side of *Rennelle*, there were men that put candles upon the water, which floating gently, without going out, were by an ebbing-tide carried towards the sea.

"The maid was married in her father's house, by a *Moula*, and about two of the clock in the morning was conducted upon an elephant to her husband's lodgings." *THEVENOT'S Travels in Persia*, p. 22, 23.

TOURNEFORT describes a marriage among the Armenians, not dissimilar in point of ceremonies; but it should be remarked, that these being now christians, some variation may be expected from their ancient customs.

"They have particular rules and customs in relation to marriage; a widower can marry but a widow; and amongst them none may contract a *third* marriage, which would be accounted fornication; and, in like manner, a widow cannot marry a bachelor. There is no great harm hitherto; nay, perhaps, marriages would be better, and more agreeably managed thus among them, than among those of other religions if the persons were permitted to know one another before the marriage. Marriages are wholly managed according to the pleasure of the mothers, who generally consult only their own husbands. After having agreed upon the articles, the mother of the young man comes to the house where the young woman dwells, accompanied with a priest, and two old women: she presents her with a ring, in behalf of her son. The young man shews himself at the same time, keeping his gravity as much as may be; for he is not permitted to laugh at the first interview: it is true, this interview is very indifferent; because the fair one, (or ugly one,) *does not so much as shew even her eyes, she is so veiled*. The day before the nuptials, the bridegroom sends suits of clothes; and some hours after, goes himself, to receive the present his bride is to make him. The next day they mount their horses, and take a great deal of care to have very fine ones. The bridegroom, coming out of the house of his bride, goes first, *having his head covered with a CORONET, a garland of gold or silver, or with a gauze veil, of a flesh colour*, according to his quality: this veil hangs half way down his body. In his right hand he holds one end of a girdle, which his bride, *who followed him on horseback*, covered with a white veil, holds by the other end: this veil hangs down to the horse's legs; two men walk by the side of the bride's horse, to hold the reins. The parents, friends, the flower of the youth, on horseback, and on foot, accompanying them to church, with the sound of instruments of music, in procession, *tapers in their*

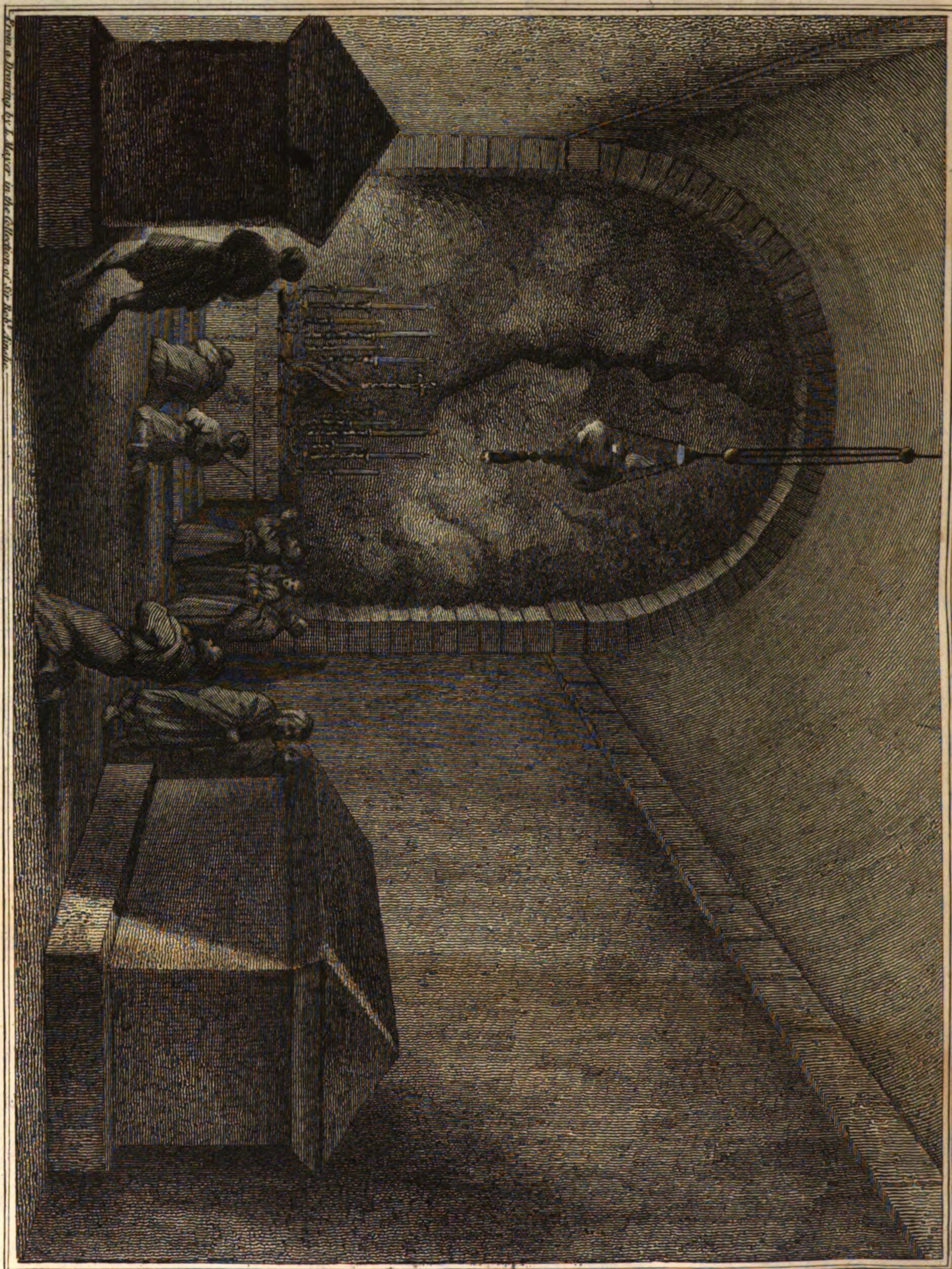
their hands, and without any disorder. They alight from their horses at the church door, and the young couple walk to the steps of the sanctuary, holding the girdle by the ends all the way they go. There they stand together abreast; and the priest, having put the bible on their heads, asks them if they will take one another for husband and wife? and they bow their heads, to signify their consent. Then the priest pronounces the sacramental words, he performs the ceremony of the rings, and says mass. After that, they return to the bride's house, in the same order they came. The husband goes to bed first: the wife does not put off her veil till she gets into bed. But, after all, this is no better than, as we say in English, *buying a pig in a poke*. They say there are *Armenians*, who would not know their wives, if they should find them lying with other men. Every night they put out the candle before they take off their veil; and the greatest part of them never shew their faces all the day."

The reader is now prepared to understand several allusions to marriage ceremonies, hinted at in Scripture. We have in these accounts mention of the time of night, vide Luke xii. 36.; where uncertainty of the master's return from the wedding-feast is extended to the cock-crowing, and to the morning. The number of people, the freedom of access, and of joining the procession, the general notoriety of the event, and many other particulars, not omitting the *crown* worn by the bridegroom, alluded to in the Canticles; nor the *possibility* that the bride, among the Jews, might follow the bridegroom on *horseback*, as *may* be thought from a passage in that poem.

Our subject has explained very clearly what kind of lamps was used on such splendid occasions, and the necessity of replenishing them with oil. The same necessity, of course, attends those vessels which contained oil for this purpose; and thus we have a material, and *difficult*, part of the parable clearly illustrated.

The upper subject is copied from CHARDIN: it shews that the female attendants of the bride carried lights, which, in this instance, are *flambeaux*. That they are flambeaux, rather than lamps, makes no difficulty; as in fact they might be either. We see also that women ride on horseback, on these occasions, as appears by those who precede the covered vehicle which contains the bride: we are moreover to consider this representation as that of a very moderate procession, and must *multiply* the figures in our imagination, yet preserving to the whole train the same employment, purposes, and characters.

The palanquin of the lower subject is used in India on these occasions, as appears from a similar procession represented in SONNERAT: whether such might be used in Judea is uncertain: yet we have supposed one like it to be described in Solomon's Song. The customs of neighbouring countries, not to say provinces, of the same empire, different ranks in life, and those variations of circumstances which need no explanation, would occasion many departures from strict similarity in these processions; while, nevertheless, their general purport and resemblance would be founded on the same principles, and they would be conducted agreeably to the same maxims and customs.



From a Drawing by J. Meyer in the Collection of Sir Rob. Mordaunt.

VIEW of the RENT in the ROCK, under MOUNT CALVARY.

London Published June 23rd 1783, by C. Taylor A^o 108, Pall Mall Garden.

VIEW OF THE BENT IN THE MOUNTAINS IN THE CHAPEL UNDER CALVARY

THIS Plate shows the general appearance of the Chapel under Calvary. The Altar is of the same material as the walls, and is of the same height. The figure of Christ is of the same material as the walls, and is of the same height. The figure of Christ is of the same material as the walls, and is of the same height.

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VIEW OF THE RENT IN THE ROCK, IN THE CHAPEL UNDER CALVARY.

THIS Plate shews the internal appearance of this Chapel seen by an additional light. The Altar at the upper end is decorated with brass candlesticks, and other ornaments. The figures represent Friars, resident in the convent, Turkish Janissaries, and some visitors. The annexed extracts from two of our early travellers give as good an account of it, as any we can offer to the reader.

“Against the east end of the stone there is a little chapel. Near the entrance on the right hand stands the sepulchre of GODFREY of *Bullein*, with a Latin epitaph;

Hic jacet inclytus GODEFRIDUS de Buglion, qui totam istam terram acquisiuit cultui Christiano, cuius anima requiescat in pace. Amen.

Here lyeth the renowned GODFREY of Bullein, who won all this land to the worship of Christ. Rest may his soul in peace. Amen.

On the left hand stands his brother BALDWIN's:

Rex BALDWINUS, Judas alter Machabeus,
Spes Patriæ, vigor Ecclesiæ, virtus utriusque:
Quem formidabant, cui dona tributa ferebant,
Cedar, Ægypti Dan, hac homicida Damascus:
Proh dolor! in modico clauditur hoc tumulo.

“King BALDWIN, another Judas Maccabeus, the hope of his country, the strength of the church, the honour of both: who was formidable to, and to whom tribute was paid by, Kedar, Dan of Egypt, and bloodshedding-Damascus: Ah grief! he lies inclosed within this little tomb.”

The first and second kings of *Jerusalem*. The far end of this chapel, called the Chapel of St. John, (and of the *annointing*, by reason of the stone which it neighboureth) is confined with the foot of *Calvary*, where, on the left side of the altar, there is A CLEFT IN THE ROCK; in which they say that the head of *Adam* was found, as they will have it, there buried; (others say in *Hebron*) that his bones might be sprinkled with the real blood of our Saviour: which he knew should be shed in that place, by a prophetic fore-knowledge. Over this are the chapels of Mount *Calvary*, ascended on the north side thereof by twenty steps; the highest hewn out of the rock, as is a part of the passage; obscure, and extraordinary narrow. The floor of the first chapel is checkered with
divers

MATTHEW xxvii. 51.

divers coloured marbles; not to be trod upon by feet that are shod. At the east end, under a large arched concave of the wall; is the place whereon our Saviour did suffer; which may assuredly be thought the same: and if one place be more *holy* than another, reputed in the world the most venerable. He is void of sense that sees, believes, and is not then confounded with his passions. The rock there rises half a yard higher than the pavement, level above, in form of an altar, ten foot long, and six foot broad; flagged with white marble; as is the arch and wall that adjoineth. In the midst is the place wherein the cross did stand; lined with silver, gilt, and imbossed. This they creep to, prostrate themselves thereon, kiss, salute; and such as use them, sanctifie therein their beads and crucifixes. On either side there standeth a cross: that on the right side in the place where the good thief was crucified; and that on the left where the bad; divided from Christ by the RENT OF THE ROCK (a figure of his spiritual separation) which clove asunder in the hour of his passion. The insides do testify that art had no hand therein: each side to the other being answerably rugged; and these were unaccessable to the workman. That before spoken of, in the chapel below, is a part of this, which reacheth (as they say) to the center. SANDYS, p. 161.

“ At about one yard and a half distance from the hole in which the foot of the cross was fixed, is seen that memorable CLEFT IN THE ROCK, said to have been made by the earthquake which happened at the suffering of the God of nature. When (as St. *Matthew*, xxvii. 51. witnesseth) *the rocks rent, and the very graves were opened*. This cleft, as to what now appears of it, is about a span wide at its upper part, and two deep; after which it closes: but it opens again below, (as you may see in another chapel, contiguous to the side of *Calvary*) and runs down to an unknown depth in the earth. That this rent was made by the earthquake, that happened at our Lord's passion, there is only tradition to prove: but that it is a natural and genuine breach, and not counterfeited by any art, the sense and reason of every one that sees it may convince him; for the sides of it fit like two tallies to each other, and yet it runs in such intricate windings as could not well be counterfeited by art, nor arrived at by any instruments.” MAUNDRELL, p. 75.

There is probably, but little occasion to remind the reader, that the allusion to the *head* of *Adam*, is merely a blunder of the early pilgrims, who misunderstood the term “ head of a *man*,” for that of our first father: the error is older than the days of Jerom. The fact appears to be, that the RENT IN THE ROCK disclosed a protuberant mass in size and form *resembling a human head*: this, being quickly observed, was the occasion of reports multiplied and magnified without reserve. CALVARY, as signifying the *pate* of the human head, is properly that small elevation which “ rises half a yard higher than the pavement;” as described by SANDYS.

VIEW OF THE INTERIOR OF THE HOLY SEPULCHRE.

THIS Print shews not only the *outer chamber*, where the pilgrims are represented in acts of devotion, as is their custom, at the commemoration of the Crucifixion and Resurrection, but the *inner chamber* also, with the Altar marking the place where the body of Jesus laid. This Altar is adorned with lights, and is held in the utmost veneration. The figures in this chamber are an Armenian, and a Copthi priest. The entrance is guarded by Turkish Janissaries; and the pilgrims in the outer chamber, are from various eastern parts. The stone which lies down, and which a pilgrim is kissing, is supposed to be that which blocked up the entrance at the time of the resurrection: be that as it may, it is of a size exactly fitted to the door-way of the Sepulchre.

The whole of these sacred premises is ornamented with hangings of damask and gold, at the expence of the king of Spain, (I think Charles III.;) who also so far patronized the Convent, as to pay the debt it had run in arrears to the Turks, for permission to attend the sacred precincts. The paucity of pilgrims during late years having been insufficient to pay the expences of the place, the Convent, of course, was distressed; and must have been abandoned, but for this royal generosity and zeal.

We shall extract from two of our earlier travellers, their accounts of this holy place, as it appeared in their times.

“ In the midst of the floor there is a stone about a foot high, and a foot and a half square; whereon, they say, the angel sat, who told the two Maries that our Saviour was risen. But St. *Matthew* saith, he sat upon the great stone which he had rolled from the mouth of the Sepulchre; which, as it is said, the Empress caused to be conveyed to the church of St. Saviour, standing, where once stood the palace of *Caiaphas*. Out of this a passage through the midst of the rock, exceeding not three feet in height, and two in breadth, having a door of grey-stone, with hinges of the same, undivided from the natural, affordeth a way to creep through into a second concave, about eight foot square, and as much in height, with a compast roof of the solid rock, but lined for the most part with white marble. On the north side, there is a tomb of the same, which possesseth one-half of the room; a yard in height, and made in the form of an altar; insomuch, as not above three can abide there at once; the place no larger than affordeth a liberty for kneeling. It is said, that long after the Resurrection, the tomb remained in that form wherein it was when our Saviour lay there: when at length, by reason of the devouter pilgrims, who continually bore away little pieces thereof (relics, whereunto they attributed miraculous effects,) it was inclosed within a grate of iron. But a second inconveniency which proceeded

MATTHEW xxviii.

from

from the tapers, hair, and other offerings thrown in by votaries, which defiled the monument, procured the pious *Helena* to inclose the same within this marble altar, which now belongeth to the *Latins*: whereon they only say mass, yet free for other Christians to exercise their private devotions; being well set forth, and having on the far side an antique and excellent picture, demonstrating the Resurrection. Over it perpetually burneth a number of lamps, which have sullied the roof like the inside of a chimney, and yields unto the room an immoderate fervour. Thousands of Christians perform their vows, and offer their tears here yearly, with all the expressions of sorrow, humility, affection, and penitence. It is a frozen zeal that will not be warmed with the sight thereof. And O that I could retain the effects that it wrought, with an unfainting perseverance!" SANDYS's *Travels*, p. 167.

"On Easter morning the Sepulchre was again set open very early. The clouds of the former morning were cleared up, and the Friars put on a face of joy and serenity, as if it had been the real juncture of our Lord's Resurrection.

"The mass was celebrated this morning just before the Holy Sepulchre, being the most eminent place in the church, where the Father Guardian had a throne erected, and being arrayed in episcopal robes, with a mitre on his head; in the sight of all the Turks, he gave the host to all that were disposed to receive it; not refusing children of seven or eight years old. This office being ended, we made our exit out of the Sepulchre, and returning to the convent, dined with the Friars." MAUNDRELL's *Travels*, p. 75.

Having lately inspected a model of this holy building, brought from Jerusalem, by one of the British officers who accompanied Sir SIDNEY SMITH, in his ever-memorable defence of Acre, I am led to think, that Mr. MAYER, who made the drawing from which our plate was engraved, in order to shew the inner-chamber advantageously, has made the entrance too large: as it certainly is impossible, judging by that model, to see the Altar in the inner chamber, as shewn in our print.

The Holy Sepulchre, in common with the church in which it stands, has undergone many dilapidations, if not entire destructions; from the enemies of the Christian faith: Sandys, however, whose accuracy is highly commended by all who have followed him, describes the Sepulchre as having a "compast, or circularly wrought—roof of solid rock, lined, for the most part, with marble;" which implies that *some part* of it was open to inspection. We cannot tell whether this is still preserved open;—but it gives us pleasure, to observe, that during the destruction of the surrounding church by fire, within these few years, (October 24, 1808) this Sepulchre remained undamaged.



JERUSALEM at DIFFERENT PERIODS.



THE FINEST AND MOST BEAUTIFUL VIEW

ON THE STATE AND CIRCUMSTANCES OF THE HOLY CITY OF JERUSALEM,

AT DIFFERENT TIMES; WITH A PLATE HINTING AT ITS DIMENSIONS
IN FOUR DIFFERENT PERIODS.

THE alterations made by Time on the face of the earth, though considerable, are not comparable to those produced by the labours of man; mountains, rocks, and for the most part rivers, also, remain; not greatly changed from their ancient appearances, where only acted upon by the lapse of ages: but where the devices and exertions of human art, and the varying intentions of human labour have been directed, whether during many ages, or few, the consequent changes are striking, and their effect in producing dissimilarity is wonderful. Every city bears witness to the truth of this remark; but as very few cities, in addition to the character of society, habitation, or polity, add that of sanctity, we are hardly capable of making proper allowance for the effect of this principle, with that variety of permanent effects which inevitably follows it.

Those who attribute to any particular locality the character of sanctity, will, doubtless, not only honour, but also adorn the subject of their consecration: they will dignify the place of their devotion to the utmost of their power—but this very attention will excite rivalship and enmity; and a place thus distinguished, will be distinguished also by the consequences of that enmity; it will be attacked and defended, destroyed and restored, with a resolution and perseverance, rarely experienced by establishments merely civil. Such has been the lot of that very ancient city, Jerusalem; and to place in a clear light the evidence of this fact, with the nature of its consequences, is the intent of our present reflections on the subject.

The antiquity of the Jewish nation, of which Jerusalem was the capital, is considerable; but of the city itself the foundation may reasonably be placed in preceding ages; for to whatever period of the world we refer the establishment of the Hebrew commonwealth, certainly this city was previously extant. The name seems to be compounded of two appellations; first, *Salem*, or *Peace*: secondly, *Jebus*, afterwards varied into *Jerus*; this perhaps denoting the inhabitants more especially, or at least, originating in a reference to their appellation. Josephus informs us that *Salem* was the capital of the kingdom of Melchizedek, and the same city as *Jeru-salem*: the Arabians assert, that it was built in honour of that illustrious patriarch, by twelve neighbouring kings; whether, or not, they *built* it for him, we may be allowed to suppose they *supported* it; and, if the reader will turn to our thoughts on the character of Melchizedek, Gen. xiv. (*Plates*) he will see how closely this agrees with the statements there submitted to his judgment. Without further investigation, as the subject has already come before us, we shall consider the antient *Salem* as the origin of the succeeding *Jerusalem*, and shall call the reader's attention to its situation, and to those places which are understood to lie in its neighbourhood.

LUKE XIX. 43.

Instances

Instances of a sacred precinct for worship giving rise to a town are numerous, and the progress is extremely natural; yet must it be carefully remembered that every sacred precinct is not a temple; for, in early ages, many places were allotted for religious ceremonies and public worship, &c. which never were covered in by building: and indeed, tribes who constantly dwelt in tents, and removed from place to place, several times in the course of a year, according to the seasons, might consecrate particular patches of ground, remarkable rocks, or hills, &c. but could have no inducement to erect devotional buildings upon them.

To treat this enquiry properly, it must be assumed that the town of *Salem* stood on or adjacent to Mount *Moriah*, and that Mount *Moriah* was one of those places esteemed sacred, which are already alluded to. It was probably, a plot of ground, of convenient size, and after it obtained repute on account of its character, of some determinate and regular form (oblong square, perhaps) prepared and levelled, bounded, also, by a hedge, or plantation of trees, called in Scripture, "a grove;" and so far consecrated by separation as to answer the purposes of a place where many might assemble for worship. Such a separated hill top being resorted to, at first a few tents were pitched at the foot of the hill, to accommodate the resorters, supposed to be numerous, on public occasions; then a few houses were built, and these by degrees from a village increased to a town, until at length from a town the establishment assumed the importance of a city. In one of these stages, probably, that of a small town, we are first made acquainted with *Salem*; of which we read, that Melchizedek came forth from it; that the valley of "*Shaveh*," or "the king's dale," was adjacent to it; that it was considered as a place peculiarly sacred, and where the word of the Lord was made known among the sons of men. [These ideas are combined in our attempts to ascertain the person and character of Melchizedek, above referred to.]

It is not easy to arrive at any certainty whether *this* Mount *Moriah* be that on which Abraham offered up Isaac, Gen. xxii. General opinion favours the sentiment, but general opinion is not decisive, though it may be presumptive, evidence. This would point to a still earlier period; for it appears, that Abraham did not find an altar constructed on that mountain where he sacrificed; yet it was doubtless a consecrated place; it agrees therefore with the notion suggested of a portion of ground enclosed for worship; and conjecture may alledge that in this enclosure, *i. e.* in some part of the hedge, or grove around it, the ram, substituted instead of Isaac, was caught by his horns: this hedge is denoted by the word *Sabek*, and the lxx. render "caught in the plant [plantation?] *sabek*," retaining the term; the Talmud renders *trees*. Interpreters differ on the species of this plant, but from the import of the word elsewhere, it seems to denote a closely planted grove, or thicket, (Psalm. lxxiv. 5. Isaiah ix. 5.) which is precisely what is presumed to be its import here. This offers one mark of a consecrated place; and the history fixes it to the summit of Mount *Moriah*, while possibly the usual residence of Melchizedek was (in his tents)

tents) in what may properly be thought the *town* of Salem, at some distance, down, or beside, the mount. That patriarch might be absent at the time, or Abraham might reach the consecrated spot privately, or there might in that early age be no establishment, of the nature of a town, *near* to the consecrated spot, merely perhaps a few straggling shepherds, (in this resembling Mount Sinai,) circumstances may easily be adjusted to the utmost privacy, whether either, or none, of these conjectures be admitted.

That many places were distinguished in the manner described is well known in classic antiquity; and they may be included among the *high places*, which afterwards occur frequently enough in the history of the Hebrews. But it may be remarked, that if this sacred spot were not *enclosed* by the town of Salem, the conjecture, which allows of the existence of that town is not affected.

Our plate contains four plans of the site of Jerusalem; in the first of them the reader sees the situation of Mount Moriah, with the *sanctum* marked on it; and the other places above named, as "the king's valley," or "the valley of equity:" taken for that which was afterwards called "the valley of Jehoshaphat," or "the judgment of the Lord:" the tribunal might stand where that gate, called the Golden Gate, is now. This is in compliance merely with the tradition, which says, that from hence all mankind shall be judged: and this, apparently, is the echo of a fact that here all mankind *had been* judged. As the whole of these four plates are traced from the same plan, the reader will perceive at once, by mere inspection, the relation these places bear to each other, and will judge by their appositions, better than by any prolonged description.

The next occurrence in which the city of Salem is mentioned, we have found in 2 Samuel v. 6, &c. The EXPOSITORY INDEX, contains a statement entirely new respecting this passage; where the *prior* sanctity of Salem, now called Jerusalem, is alledged as an argument against the admission of David. Here it might be asked, why should David wish to establish himself in this city, particularly? was it because here *had been* the scene of transactions in ancient time, analagous to those which he meditated as proper for the seat of his sovereignty?—because, this was the place the Lord *had chosen*, anciently, to put his name there? Certainly, this is at least plausible; and it agrees with our answer to the question, what could induce the Jebusite to refuse David? *i. e.* the place was already sacred; the addition of the royal residence could add nothing to its dignity, but rather the contrary, in the opinion of those who had venerated it. It is necessary to enquire, who was this Jebusite? Looking back to Josh. xviii. 28, we find *Jebusi* the name of Jerusalem, which is varied, Judges xix. 10, to *Jebus*; it appears also to have been one of the cities of the Jebusites, and in the possession of a people "not of the children of Israel." In Gen. x. 16. we read, that Canaan was the father of the Jebusite; and it seems that from the early age to which that chapter refers, this family had been settled

settled here;—a family unquestionably of the *truly ancient Canaanites*, such as those with whom Abraham and Isaac covenanted; and perfectly distinct from the *Palli*, who overrun Canaan, while Israel was in Egypt. These *Palli* were the intruders who were chiefly expelled by the Israelites, in after ages, Exod. xxxiv. 11. This notion supposes the more ancient inhabitants to retain their original possessions, according to the words of the historian, Numb. xiii. 29. Joshua xv. 63. “the Jebusites, the inhabitants of Jerusalem, the children of Judah could not drive them out; but the Jebusites dwelt with the children of Judah at Jerusalem unto this day:” meaning, at most, that the Judahites had a hamlet, adjacent to this establishment of the Jebusites; for, that *Jebus* itself was “in the hands of strangers,” appears from the conduct of the Levite, Judges xix. 10, already quoted. And thus, I think, may be reconciled, those passages which speak of the slaughter of its king, *i. e.* its *Palli* king, (Joshua xii. 10.) and the expulsion of its people, *i. e.* its *Palli* people, who certainly accompanied their king to battle, and shared his fate. So Judges i. 8. the children of Judah had smitten and burnt Jerusalem, (*i. e.* the *Palli* city)—but, if the *ancient Canaanite* part of the city was spared, or, if *these ancient Canaanites* escaped to Mount Moriah, rendered sacred by the ancestors of Judah themselves, then *these* people might still “dwell among the children of Judah.” This hypothesis of two descriptions of Canaanites, solves every difficulty; which otherwise seems almost impossible; as we are told, in the same chapter, verse 26, that “Benjamin did not expel the Jebusites, but they dwelt with the children of Benjamin in Jerusalem, unto this day.” And something like this is *necessary*: for, if neither Judah nor Benjamin drove out the Jebusites, then they were not driven out; but, if the king of Jerusalem was slain, if Jerusalem was fought against, taken, smitten with the edge of the sword, and burned, then surely its inhabitants were driven out;—which is a contradiction in terms, not to be endured.

We are now prepared to assign reasons for two circumstances which have strangely puzzled interpreters; the first is, that, 2 Sam. xxiv. 23, Araunah the Jebusite is called “*King*,” (and in all copies and versions, as Dr. GEDDES notes with surprise,) meaning I suppose, that he derived a pedigree from the *ancient Canaanite* kings of the place, and even at this time held at least family authority over his *clan*, the inhabitants of the town. Perhaps, too, the name *Ornan* given him, 1 Chron. xxi. 18, was his Hebrew, or Jewish, name; while *Araunah* was his Canaanite, or Jebusite, appellation.

The second circumstance is of greater consequence; for we read 1 Chron. xxi. 29, that the Jewish national altar, whereon David certainly ought to have sacrificed, was at this time stationed at Gibeon; now, what could induce the angel of the Lord to tell Gad, and Gad to tell David (verse 18.) that he should go up, and raise an altar to the Lord, in the threshing-floor of *Ornan i. e. Araunah*, the Jebusite, unless here had been a consecrated place, *formerly?*

Why

Why did David *go out* from his royal palace, &c. Mount Zion, and pass through the interjacent city? was there not ample space on Zion? and plenty of conveniences, of the king's own property, but he must, under peremptory direction go down Mount Zion, and go up Mount Moriah, to raise an altar, on premises not his own?

But, if this threshing-floor adjoined the antiently consecrated spot on Mount Moriah, then it was the nearest approach to the ancient *Fanum*, which was in David's power; he could not enter this holy place personally; but he sacrifices as near to it as possible,—close to it. This threshing-floor he purchases of *Araunah* (with cattle, &c.) for “*fifty shekels of silver*,” but, afterwards, explaining to the Jebusite his intention of building a magnificent temple on Mount Moriah, he further obtains for that purpose, the site of the ancient *Fanum* itself, *i. e.* the whole summit of the mountain, from its natural guardian *Araunah*, for “*six hundred shekels of gold*.” 1 Chron. xxi. 25.

This seems to have been a very great price; too great indeed, for the mere value of the ground: but this view of the subject accounts for it;—it was *sacred* property;—it would not have been alienated, even for the purposes of a royal establishment, the king's palace, &c. (vide on 2 Sam. vi.) but as its sacred character was to be preserved and perpetuated, as additional honour was the purpose for which it was alienated, objections subsided. David obtained it for his purpose; yet at a great price; so that *Araunah* received on this occasion fifty shekels of silver for his own private property, and six hundred shekels of gold as a consideration for the public property of his family, and that of his people. Thus the sacred character of the place points it out as a proper station for royal resort, and for an intercessory altar, under circumstances so urgent, extraordinary, and extremely afflictive; while these very circumstances, in connection with the impulse of piety, induce David to purchase it, and *Araunah* to part with it; perhaps, not without reluctance, and certainly at a price liberal, if not magnificent. The reader will turn to our Plate No. II. and will perceive the relative situations of Mount Zion, and Mount Moriah, and to what distance David proceeded from one, that he might erect an altar on the other. N. B. David afterwards brought the Tabernacle-altar, &c. into his own palace, Mount Zion, and Solomon transferred them to the Temple on Mount Moriah; which seems to manifest a pretty steady adherence on the part of the Jebusite to the *honour* of his possession; which he did not relinquish, till every thing was ready for constructing the intended temple: [too sacred to be made a working place, 1 Kings vi. 7.]

There is another passage, which must not be overlooked in this enquiry;—we know that it was customary for victors to carry the trophies of their victory to the temples of their deities, and there to consecrate them. So we find the Philistines, 1 Samuel, xxxi. 10. 12. suspending in triumph the bodies of Saul and his sons, on the walls of Beth Shan; [the temple of Shan] but, the
armour

armour of Saul they put in the temple of Ashtaroth. In like manner, 1 Sam. xvii. 54. David carried the head of Goliath in triumph to Jerusalem; but he put his armour in the sacred tent, (not David's own tent, for he had none, being merely sent on a message; but) the national tabernacle, for here we find part of it, (the sword) long after; and from hence he received it again from Ahimelech, 1 Sam. xxi. 9. Now, what could induce David to carry Goliath's head to Jerusalem, rather than to any other sacred, or even public, or famous repository, unless Jerusalem were renowned for sanctity? Was the national ark here?—No. Was this city, at this time a royal residence?—No. Had it claims superior to those of Bethlehem, where the victor lived? Not unless its character of sanctity be allowed; under which allowance all becomes easy; and clearly the after-proceedings of the Philistines with the body of Saul, were but a repetition of what David had formerly done with the head of Goliath.

The result of these considerations confirms the proposition, that *here* was a sacred place of worship, before Solomon embellished it, by erecting his Temple on the top of this Mount.

It is proper, therefore, strongly to urge the distinction between Mount Zion and Jerusalem: those names are frequently used by theological writers, as if they were identically the same place; whereas, one of them, Zion, refers to the royal or kingly office among the Jews, the royal palace being seated there: the other refers to the priestly office, it being the seat of the national worship; how frequently so ever these may be associated by sacred writers, after the days of David, yet they are not the same, neither are they, strictly taken, equivalent to each other; but are distinct, though combined.

We are not writing a history of the city of Jerusalem at length, and can but hint at its subsequent enlargements by succeeding kings of Judah.

The city of *Jerusalem* was built on hills, and was encompassed with mountains, Psal. cxxv. 2. on a stony and barren soil; it was about sixty furlongs in length, according to *Strabo*, lib. xvi. Adjacent to *Jerusalem*, were the fountains of *Gihon* and *Siloam*, and the brook *Kidron*: also the waters of *Ethan*, which *Pilate* conveyed through aqueducts into the city. *Joseph.* lib. ii. cap. 15. *de Bello.* The ancient city of *Jebus*, which *David* took from the *Jebusites*, was not large. It stood on a mountain, south of the temple. The opposite mountain is *Sion*, where *David* built a new city, which he called "the city of *David*," wherein stood the royal palace.

Between these mountains lay the valley of *Millo*, which separated the ancient *Jebus* from the city of *David*, but was filled up by *David*, and *Solomon*, to join the two cities. 1 Kings ix. 15, 24. xi. 27. After the reign of *Manasseh*, a new city is mentioned, called the *Second*, inclosed with walls by that prince. 2 Chron. xxiv. 22. xxxiii. 14. and 2 Kings xxii. 24. The *Maccabees* considerably enlarged it on the north, by inclosing a third hill, as part of *Jerusalem*. *Josephus* speaks of a fourth hill, called *Bezetha*, which *Agrippa* joined

joined to the city. This new city lay north of the temple, along the brook *Kidron*. In consequence of these junctions, *Jerusalem* had never been so large, as when attacked by the *Romans*. It was then thirty-three furlongs in circumference:—nearly four miles and a half. *Josephus* informs us, that the wall of circumvallation, constructed by *Titus*, was thirty-nine furlongs; or four miles, eight-hundred and seventy-five paces. Others admit a much larger extent. See *Vallalpandus*, for the affirmative; and *M. Reland*, for the negative, *Palestin.* t. 2. lib. 3. See CALMET's Dictionary. Art. JERUSALEM.

The condition of *Jerusalem* in the time of Christ, was much the same as afterwards when assaulted by the *Romans*; and what this was, Tacitus being a Roman, and a military man, may inform us.

“*Jerusalem* stood upon an eminence, difficult of approach. The natural strength of the place was increased by redoubts and bulwarks, which, even on the level plain, would have made it secure from insult. Two hills, that rose to a prodigious height, were inclosed by walls constructed with skill, in some places projecting forward, in others retiring inwardly, with the angles so formed, that the besiegers were always liable to be annoyed in flank. The extremities of the rock were sharp, abrupt, and craggy. In convenient places, near the summit, towers were raised sixty feet high, and others, on the declivity of the sides, rose no less than a hundred and twenty feet. These works presented a spectacle altogether astonishing. To the distant eye they seemed to be of equal elevation. Within the city, there were other fortifications inclosing the palace of the kings. Above all was seen, conspicuous to view, the tower of *Antonia*, so called by *Herod*, in honour of the triumvir, who had been his friend and benefactor.

“The temple itself was a strong fortress, in the nature of a citadel. The fortifications were built with consummate skill, surpassing, in art as well as labour, all the rest of the works. The very porticos that surrounded it were a strong defence. A perennial spring supplied the place with water. Subterraneous caverns were scooped under the rock. The rain water was saved in pools and cisterns. Since the reduction of the place by *Pompey*, experience taught the Jews new modes of fortification; and the corruption and venality, that pervaded the whole reign of *Claudius*, favoured all their projects. By bribery they obtained permission to rebuild their walls. The strength of the works plainly shewed that, in profound peace, they meditated future resistance. The destruction of the rest of their cities served to increase the number of the besieged. A prodigious conflux poured in from all quarters, and among them the most bold and turbulent spirits of the nation. The city, by consequence, was distracted by internal divisions. They had three armies, and as many generals. The outward walls, forming the extent, were defended by *Simon*: *John*, otherwise called *Bargioras*, commanded in the middle precinct: *Eleazar* kept possession of the temple. The two former commanded the greatest number

number of soldiers; the latter had the advantage of situation. The three parties quarrelled among themselves. Battles were fought within the walls; stratagems were practiced; conflagrations destroyed part of the city, and a quantity of grain was consumed in the flames. Under colour of performing a sacrifice, John contrived to send a band of assassins, to cut off Eleazar and his whole party in one general massacre. By this atrocious deed he gained possession of the temple. From that time two contending factions threw every thing into confusion, till the enemy at their gates obliged them to unite in their common defence." TACITUS, Hist. lib. v. Mr. Murphy's Translation.

These accounts are particularly interesting, because they clearly illustrate the natural strength of Jerusalem, and justify the boastings of the nation, of which Scripture gives instances; as, Psal. cxxii. 3. cxxv. 2. Under these circumstances, how very unlikely, perhaps even *ridiculous*, did the prophecy of our Lord appear to the Jews, Luke xix. 43. every word of which opposes their confidence in these defences. "Thine enemies shall cast a trench about thee (rather raise a *circumvallation*) and compass thee around, and keep thee in on every side, and shall lay thee even with the ground, and thy children within thee, and they shall not leave within thee one stone on another." It is not impossible that this was *literally* fulfilled in every particular, so far as regarded Jerusalem itself; though some towers, or even streets, of the cities appended to it might be spared, to accommodate the Roman garrison in the place.

Our fourth Subject shews the present state of Jerusalem, the Holy City, the holy temple, "trodden down by the Gentiles, till the times of the Gentiles be fulfilled." It is necessary that we should fix this idea in our minds, "till the times of the Gentiles be fulfilled"—and then, the probability is, that this same spot which during so many ages has been distinguished, and at some periods so highly and singularly distinguished, though now degraded, shall again enjoy favours which shall render it conspicuous. Different opinions may be entertained respecting the nation of the Jews, and consequently respecting the fate of their capital, Jerusalem; but, the result of these enquiries leads at least to the modest conjecture, that it is still to be the scene of events foretold in prophecy, which will be no less corroborative of faith, when they do happen, than those events have been which are narrated in history; events which surely no one can properly consider, without feeling a persuasion rising to expectation, of a *somewhat*, though to describe, or to determine, that *somewhat*, may surpass the conjecture of the wisest of men.

* * In confirmation of the idea that Jerusalem is destined to be "trodden down of the Gentiles," for a time appointed, the endeavours of Julian the Apostate to rebuild the temple, after it had lain about three hundred years in ruins, may fairly be appealed to. Dr. E. D. Clarke, who examined the present Structure, or Mosque, by which the character of the place for sanctity, is continued, and preserved, saw evident remains of *Roman* Masonry, in the premises around the Mosque, and has expressed his conviction that they are unquestionably, constructions of Julian's age. In vain were Julian's endeavours: yet it is extraordinary enough, that Religions contrary to the Jewish, as well as to the Christian, which has branched from it, should agree to do honour to this spot, above all others, and to enable it to boast a continued sanctity from a period earlier than the days of Abraham, down to nineteen centuries after the advent of the Messiah.

N^o 1.N^o 2.N^o 3.N^o 5.N^o 4.

LANTHORNS OF THE EAST.

The following Extract is from Mr. HARMER'S OBSERVATIONS, Vol. II. p. 429.

“CAPTAIN NORDEN, among other particulars he thought worthy of notice, has given some account (Part I. p. 83.) of the *lamps* and *lanterns* that they make use of commonly at Cairo. “The lamp,” he tells us, “is of the palm-tree wood, of the height of twenty-three inches, and made in a very gross manner. The glass, that hangs in the middle, is half filled with water, and has oil on the top, about three fingers in depth. The wick is preserved dry at the bottom of the glass, where they have contrived a place for it, and ascends through a pipe. These lamps do not give much light; yet they are very commodious, because they are transported easily from one place to another.

“With regard to the *lanterns*, they have pretty nearly the figure of a cage, and are made of reeds. It is a collection of five or six glasses, like to that of the lamp which has been just described. They suspend them by cords in the middle of the streets, when there is any great festival at Cairo, and they put painted paper in the place of the reeds.’

“Were these the *lanterns* that those that came to take Jesus made use of? or were they such *lamps* as these that Christ referred to in the parable of the virgins? or are we rather to suppose that these *lanterns* are appropriated to the Ægyptian illuminations, and that Dr. Pococke’s account of the lanterns of this country, will give us a better idea of the lanterns that were anciently made use of at Jernsalem?

‘By

JOHN xviii. 3.

‘By night,’ says that author, (Vol. 1. Descript. of the East) speaking of the travelling of the people of Egypt, ‘they rarely make use of tents, but lie in the open air, having *large lanterns*, made like a pocket paper lantern, the bottom and top being of copper, tinned over: and instead of paper, they are made with linen, which is extended by hoops of wire, so that when it is put together, it serves as a candlestick, &c. . . . and they have a contrivance to hang it up abroad, by means of three staves.’

“It appears from travellers, that lamps, wax-candles, torches, lanterns, and cresset-lights, (a kind of moveable beacon) are all made use of among the Eastern people, (Thevenot, Part. II. p. 35 and 37; Norden, Part I. p. 124; Hanway.) I think also, that there are only three words in the New Testament to express these things by, of which *λυχνος* seems to signify the *common lamps* that are used in ordinary life, (see Luke xv. 8.) which, according to Norden, afford but little light: *λαμπας*, which is one of the words which is made use of, John xviii. 3, seems to mean any sort of light that shines brighter than common, whether torches, blazing resinous pieces of wood, or lamps that are supplied with more than ordinary quantities of oil, or other unctuous substances; such as that mentioned by Hanway, in his Travels, Vol. I. p. 223, which stood in the court-yard of a person of some distinction in Persia, was supplied with tallow, and was sufficient to enlighten the whole place, as a single wax-candle served for the illumination of the room where he was entertained; and such, I presume, were the lamps our Lord speaks of in the parable of the virgins, which were something of the nature of common lamps, for they were supplied with oil; but then were supposed to be sufficient for enlightening the company they went to meet, on a very joyful occasion, which required the most vigorous lights. [Sir J. Chardin, in his MS. note on Mat. xxv. 44. informs us, *that in many parts of the East, and in particular in the Indies, instead of torches and flambeaux, they carry a pot of oil in one hand, and a lamp full of oily rags in the other.* This seems to be a very happy illustration of this part of the parable. He observes, in another of the MSS. that they seldom make use of candles in the East, especially among the great; candles casting but little light, and they sitting at a considerable distance from them. Ezek. i. 18. represents the light of lamps accordingly as very lively.]”—* * Compare the lower subject; Plate, Mat. xxv. 6.

“The other word, which occurs in John xviii. 3. is no where else to be found in the New Testament; and whether it precisely means lanterns, as our translators render the word, I do not certainly know. If it doth, I conclude, without much hesitation, that it signifies such *linen lanterns* as Dr. Pococke gives an account of; rather than those mentioned by Norden, which seem rather to be machines proper for illuminations than for common use; and if so, the Evangelist perhaps means, that they came with such *lanterns* as people were wont to make use of when abroad in the night; but lest the weakness of the light should give an opportunity to Jesus to escape, many of them had *torches* or *such large and bright burning lamps* as were made use of on nuptial solemnities, the more effectually to secure him. Such was the treachery of Judas, and the zeal of his attendants!”—* * The *Military* burner, torch, or lantern?

Our plate represents the *folding* linen lanthorn described by Pococke.—No. 1. The head of the lanthorn, with the manner of hanging it. No. 2. The lanthorn hung on staves. No. 3. The same kind of lanthorn, from Mr. Dalton’s Customs of Egypt, Plate xviii; where it hangs in a room during supper. No. 4. The lanthorn let down, so as to suffer the candle to appear. No. 5. “A vase made of a bladder, with which they pour oil into their lamps.” Dr. Pococke.



GEOGRAPHICAL ILLUSTRATIONS OF SCRIPTURE HISTORIES, PARTICULARLY JOURNEYS.

Acts, Chapter xxviii.

THE Map before us comprizes so great a portion of Countries connected with the history of Scripture events, that it cannot be expected we should apply it to ALL those incidental notices of places, to which nevertheless, it is adapted. But, in order to shew the utility of Maps, accompanying Scripture, we shall endeavour, by means of the present, to illustrate some of the principal of those Journeys, whose histories are more fully related; and whose consequences have been most interesting to us, as readers of the Sacred Volume.

The reader will turn to the MAP of the "Supposed Situation of Paradise," *Gen. ii. 8.* and will, for the present, admit, that west of the mountains of Caucasus, and not far from the town marked *Bamian*, was the birth-place, and original residence, of the patriarch Abraham. The proofs of this, we can now only hint at: as, 1. That it was the seat of his great ancestor *Shem*, who likewise (with, or after, him) travelled west-ward, and abode in Judea; so that, when the Lord says to Abraham, "depart," &c. *Gen. xii. 1.* it might be, by the ministry of Shem; at that time, the high priest of all mankind. 2. That Abraham is repeatedly said to have come "from the East,"—or rather, from a province named "the East." And this was the name given by the Persians, to this (most eastern) province of their dominion: 3. that the Fathers of the Hebrew nation are said, *Josh. xxiv. 2.* to have dwelt "on the other side of the flood," i. e. *beyond the river*, where they served other gods;—"I took your father Abraham from *beyond the river*." or, "the other side of the flood," which description of a territory, has hitherto been restricted in its import, to *beyond the river Euphrates*; but, that this restriction is ill founded, we learn from Major *RENNELL*, who mentions "a province beyond the river *Jihon*, called *Mawer-ul-nere*: which signifies, *the country beyond the river*". 3. *Balk*, which is the town where the inhabitants affirm that Abraham was born, stands on the eastern bank of the river *Jihon*, or *Oxus*; and major *RENNEL* tells us, that "the name *Maher-ul-nere* is applied to the country *beyond the Jihon*." *Memoir, Map of Hindostan*, p. 200.

But, we may come yet nearer to a decision on this matter: for, on examining the Map drawn up by *Olearius*, to the "Ambassador's Travels," beyond the river *Oxus* north, but south of the river *Oraxantes*, both of which rivers fall into the Caspian sea, is delineated a province called *MAWER-E-NAHER*: this is in-

Acts, Chapter xxviii.

deed,

deed, beyond *Balk*, or *Belch*, but, by Major RENNELL, this province is extended so far south as to include that city. Now, it appears that *this is the very name used by Joshua*, who says, "And I took your father Abraham (*in or from*) MAVER-E-NAHER (מעברנהר) and caused him to walk throughout the land of Canaan," &c. This province then, retains its ancient name to this day: the same is affirmed with a very slight variation, in the verse preceding, "Thus saith Jehovah God of Israel: in AUVER-HE-NAHER your fathers dwelt anciently, Terah and Abraham, &c." This is, no doubt, the *Maher-ul-nere* of Major RENNELL; and this certainly agrees with the proposition, that Abraham came from *Bactriana*, i. e. *Kedem*, or *the East*. Nor is this weakened by the geographical note inserted *Gen. x. 23, 30*. Aram had a son named MESH, who might probably give name to "*Mesha*, as thou goest unto *Sephar*, a mount of *Kedem*"—or the *East—Bactriana*. *Mesha* has very probably its representative in the present city MESHED, which is situated east of the Caspian sea, towards *Bactriana*, in the province of *Chorasan*. It was to this city HANWAY was travelling, when his caravan was plundered, Vol. I. p. 129. It was designed to have been the emporium of the Caspian trade.

The city BALK is the ancient *Bactra*, which gave name to the province of *Bactriana*, or, in the language of Persia "the East,"—in Hebrew, *Kedem*. As this country is far east of our Map, we do not further pursue this argument; but suggest it, merely, as an apology for introducing Abraham at once, in *Hamadan*, the ancient *Ecbatana*, in the way from *Kedem* to *Nineveh*. We have, however, drawn a line, which serves to hint his journey from "the East," and, instead of placing him in *Mosul*, the present *Nineveh*, we direct it to *Eski Mosul*, ancient *Nineveh*, still known by the name of *Bel-Ad*: i. e. "Baal the Lord." As *Baal* is the sun, whose representative on earth is fire, I conceive that this is the ancient "*Ur*, or *Aur*, (*fire*) of the Chaldees;" and, as it retains the name of "Lord Fire"—*Bel Ad*, there can be little doubt but here was the seat of the ancient national worship of that deity. Some say, that *Ur*, or *Ura*, in *Mesopotamia*, two days journey from *Mosul*, toward *Nesibin*, was the *Ur* of the Chaldees; this rather confirms our notion, than confutes it, as *Bel-Ad* is up the *Tigris*, about that probable distance from *Mosul*, toward *Nesibin*; and all eastern traditions agree, that Abraham lived where the royal court of the king was established, i. e. apparently, in Old *Nineveh—Eski Mosul*.

From *Bel-Ad* the roads leads to *Nesibin*, and from *Nesibin* to *Roha*; but Abraham designing to settle for a time, or perhaps altogether, took a lower course, to *Haran*, where Terah his father died, *Gen. xi. 31*.

From *Haran* trace this patriarch's journey to *Hamah*, or *Hamath*; which is very properly described as "the entering in," *Josh. xiii. 5. et al.* for so indeed it was: 1. as being the regular course of travel from *Chaldea*; 2. as being the first town on the Syrian side of the river; so that here travellers entered in to that province; i. e. the land of promise. Accordingly we find, verse 6, Abraham passed through (or over) the land, to *Sichem* and *Moreh*.

We shall not pursue this Patriarch's movements in Canaan ; or his journey to Egypt ; the relative situations of these countries appear so distinctly on our Map, as to supersede the necessity of it. But, in an *inverse* order, trace the journey of Eliezer, Abraham's servant, to fetch Rebecca, *Gen.* xxiv. The same of Jacob, who went from *Beersheba* toward *Haran*, *Gen.* xxviii. 10. which he reached, chap. xxix. 4. and which, observe, is called "the land of the people of the East," verse 1. probably because the family of Terah, &c. migrated from the East, had here established their residence.

Observe, how, taking *Haran* for the central point, it arranges the story of Jacob's flight from Laban. Laban set three days journey between himself and Jacob, chap. xxx. 36. say *east* of *Haran*, toward *Nesibin* : Jacob residing *west* of *Haran*. When Laban went to shear his sheep, *i. e.* to his flock, *east* of *Haran*, Jacob took the opportunity to commence his journey for Canaan, westward, by the regular track, "and he rose up, and passed over the river," the Euphrates, at *el Bir* ; "and came to mount Gilead ;" the first station, probably, where a large flock of sheep could be pastured for a length of time : this was now in a different government from that where Laban lived, and beyond the Chaldean dominion.

The journey of Jacob down into Egypt, and the return of his tribes from thence, need no illustration here.

To apply the directions given the prophet Jonah, to visit Nineveh, to this passage northward from Syria, is so obvious, that it also might have been omitted ; were it not proper, to remark how very *contrary* was the course he intended to steer, when he took ship at Joppa (*Jaffa*) on the Mediterranean, and what a *terrible* long way the whale travelled with him in his belly, if he did (as the Jewish Rabbins say) discharge him ashore on the Banks of the Tigris, at Nineveh (*Mosul*). To say nothing of the passage round Africa, trace only the natural impediments (too strong for sailing boats) from the Persian gulph to Bagdad, and by that course to Nineveh : many hundreds of miles !

The extent of the kingdom of the Hebrews was, from the river of Egypt, south, to the river Euphrates, north-east. This "river of Egypt" would occupy us too much, should we attempt to investigate it : I can hardly think it was the Nile : but rather some stream nearer to Judea—in which country, the most southern town, apparently, was *la Rish*, or *el Arissa*, though Solomon probably included *Catieh*, or *Catzieh*, in his dominions, *Cant.* iv. 2. Northward, the Hebrew power extended not only along the western bank of the river Euphrates, but, occasionally, included towns on the eastern side, as *Kerkisia*, or *Carchemish*, 2 *Chron.* xxxv. 20. while on the north it included *Hamath* ; for we are expressly told, 2 *Kings* xiv. 28. that Jeroboam *recovered* Damascus and Hamath : whence it appears, demonstrably, that the promise made to Abraham, *Gen.* xv. 18. was fulfilled to his posterity ; who actually did govern this country, at times (not constantly) from "the entering in of Hamath," and from the river Euphrates to Egypt.

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As a reverse to this extent of the Hebrew kingdom, observe the distance from Jerusalem west, to Babylon east, to which the chiefs of the Jewish nation were carried captive by Nebuchadnezzar, *2 Kings* xxv. Observe also, on this article, the precision of the prophecy, *Amos* v. 27. "I will carry you captive *beyond* Damascus;" which some commentators have misunderstood, supposing, that the Hebrews were to be carried into a more *distant* captivity than the citizens of Damascus were; whereas, we read, *2 Kings* xxv. 21. that *Riblah*, (the *Hems* of our map) to which city Nebuzaradan, captain of the guard, carried the people of the land, to meet king Nebuchadnezzar, and where that king "smote them, and slew them," was, "in the land of *Hamath*;" and *Hamath*, we see by our Map, was double the distance of Damascus from Jerusalem; and being in the same customary road of passage, was therefore far *beyond* it: this, at least, may be taken as one sense included in the prophecy.

Moreover, it should appear, by their going so far north, that the army of Nebuchadnezzar, with the Jews its captives, returned to Nineveh, by the same route as that by which Abraham, the Father of the Hebrews, had entered this country: so that the Israelites had the additional mortification of beholding in the character of prisoners, the land of their fathers, and of their relatives, the descendants of Laban, &c. We see too, that Nineveh, the *Mosul* of our Plate, was a probable station for part of these captives to be left at, (as *Tobit*, &c. was) while others were taken, either along Mesopotamia, or down the Tigris, to Babylon:—a long distance south.

It is likely, moreover, that some considerable division of captives was sent *north*, from Mosul; for we find Ezekiel, chap. i. among the captives by the river of *Chebar*, in the land of the Chaldeans:—his immense distance from Judea, with which probably he had no intercourse whatever, and from Babylon, amply accounts for the interval of time (six months) which passed between the arrival at Babylon of the news of the destruction of Jerusalem, and its reaching the residence of this prophet, *Ezek.* xxxiii. 21. It is seen in FRAGMENT, No. CVI. that we hinted at circumstances which place this prophet in a country answering to the character of Arzeroum; but, though that *might* be, yet being unable to prove it, we shall rather place Ezekiel between Arzeroum and the Caspian, or, *on* the Caspian, if insisted on,—say Derbend, or any where else; it must be, 1. where wood was extremely scarce; 2. at a great distance from Babylon. This northern situation of the prophet Ezekiel accounts too, for his prophecies against *Gog* and *Magog*, which were people, as appears by our "Map of the Settlement of Nations," north, but not very far north, from this station of the prophet.

This is a proper place to illustrate some particulars of the carrying into Captivity the people of the Jews. That history must be divided into distinct periods; and considered as comprising distinct events. The first is, the Captivity of the two tribes and half, which were settled east of the Jordan; and this seems a very natural order of occurrences, when we consider that the captivating power was the

the king of Nineveh, Tiglath Pilezer, who, coming from the north, and entering in at Hamath, (the regular course) would first over-run Damascus, then Howran, then the east of the Jordan, down to *Moab*, or *el Raba*; this being, probably, a more easy progress than over Mount Lebanon, and along the sea coast, westward. We place this event about 740 years before A. D. The second Captivity included the remainder of the ten tribes, *i. e.* those west of the Jordan, who were carried away by Shalmanezzer, about twenty years after the former. These people would naturally be placed in cities, and districts, subject to the king of Nineveh: *i. e.* the northern part of our Map: for Ezekiel was certainly in these parts; and was by no means a solitary resident there. Perhaps even in this sense part of the Jews might be carried captive *further* from their native land than the citizens of Damascus were, [who might stay in Mesopotamia.]

Moreover we remark, that Tiglath Pilezer carried the eastern tribes captive into 1. *Halah*, and 2. *Habor*, and 3. *Hara*, and to the district around the river, 4. *Gozan*: 1 Chron. v. 26. 2 Kings xvii. 6. Where are these cities? We conceive the river 4. *Gozan*, which is expressly said to be in Media, may be the *Ozan*, or *Kisil-ozan*, (red-Ozan) which runs into the Caspian sea on the southwest, on a branch of which we have the town of 2. *Abhar*, marked *Abar*, in Hanway's Map, and placed in lat. 36. this is probably the *Habor* of the sacred text. *Hara* may be the town marked 3. *ChoARA*, near Rages, in Major RENNELL's Map, though the Major himself guesses it may be the district *Tarom*; and *Halah*, or *Chalah*, may be *Kalar*, on the south of the Caspian. This agrees with the residence of Tobit's friend Gabael, at *Rages* in Media, the modern *Rey*: and we learn from the history that many Jews were settled hereabouts, by the number of husbands offered to Sarah; and by the numerous friends who congratulated the family, on occasion of her nuptials with Tobias.

This second Captivity of Israel was by Shalmanezzer, *ante* A. D. 721, and I incline to think, that some of these captives were placed north of the others, on the western shore of the Caspian: where the sons of Cush were settled, which is so marked in our Map of "the Settlements of Mankind." It is likely, in fact, that hence came the Cushites who occupied the land of Israel, instead of the Israelites, (and I would not be sure, that they are not the "Caspians" of Major RENNELL's Map.) So that the king of Nineveh placed not only a great tract of country between the return of these people to their native lands, but his capital Nineveh, also, whereby he was enabled to counteract their motions, had they attempted any. This agrees also with the prophecy, *Amos* i. 5. "Syria shall go into captivity to *Kir*;"—no doubt the province adjoining to the river *Kir*, or *Kyrus* (Cyrus);—and, that this was a *northern* province appears from *Isaiah* xxii. 6. "Elam (Persia, *i. e.* the south) bare the quiver; *Kir* (*i. e.* the north) uncovered the shield;" they were, therefore, under the orders of the same monarch, and each extreme, perhaps, of his dominions. This placing of these people as neighbours, in their new situations, is extremely characteristic of eastern management. We have accounts that these Cushites when settled in
Samaria,

Samaria, claimed kindred with the Hebrews; to the great mortification of the Jews, who repelled the very idea, with inexpressible contempt. But, as we are not fettered by Jewish prejudices, we may enquire on what could this relation be founded? To be sure, not on their immediate removal from the Cush, near the Caspian; but, there certainly was another *Cush*, hitherto disregarded if not unsuspected, by commentators; that, which according to Moses, was encompassed by the second river of Paradise, the *Jihoon*: now, as we have fixed the *Jihoon* to be that stream which approaches the city of *Balk*, and which, till A. D. 1640, made a great bend, from north running westward, so as to ENCOMPASS the province of *Bactriana*, before its discharge into the Caspian, it follows, that this was the *Cush* of Moses, in this place of Genesis. Moreover, the Cushites now west of the Caspian, having come *originally* from this eastern situation, as Abraham, the father of the Jewish nation, also had done, they inferred as a consequence, that being at least countrymen by origin, they might claim a kindred, an affinity, to the Jews. Had they not been considered as invaders, and surreptitious possessors of Israelitish property, this might possibly have been admitted; notwithstanding they brought with them idols, perhaps not unlike those which Terah, if not Abraham, had served in OBER-ENAHHR, on "the other side the river"—the *Jihoon*.

Let us now turn to the (eastern) southern extent of our Map, where we find the prophet Daniel residing at *Shushan-Royal*, (at *Sus*, or at *Jundi Sapor*, in our Map) and receiving visions by the side of the river *Ulai*; the river at *Sus*, or that beside *Jundi Sapor*. It is likely, that he was in attendance at *Shushan*, by virtue of his public office; and, perhaps, no great number of Jews was settled in company with him: as the kings of Persia resided part of the year at *Ecbatana*, (Hamedan) and other part at *Shushan*. Taking this then, for the southern limits of the settlements of the Jewish captives, see to what extent from Arzeroum, or Derbend north, to *Shushan* south, were dispersed, the families of that nation which had occupied the little tract of Judea, in the west. [The *third* captivity.] This has its aspect too, on the difficulties started, among the Jews about receiving the prophecies of (Ezekiel, and) Daniel, into the canon of Scripture: as 1. they were delivered *out of the holy land*: 2. the distance of those who delivered them, from where they could be authentically acknowledged, and authoritatively admitted; which must have been (at this time) in Babylon, where, no doubt, the main body of the Hebrew people continued.

Not wholly to omit the return of the captives from their extensive dispersion, we remark, that probably the major part, by far, of the Israelites who returned into their own land, was from Babylon: Ezra, chap. ii. 2. viii. 1. but possibly this caravan did not take the northern route, but crossed the desert, south of Tadmor.

After this specimen of the utility of our Map, quitting the journeys recorded in the Old Testament, let us consider some of later ages, in the New Testament. We say nothing of those of our Lord; because, the size of our Map does not

not allow sufficient detail; but, as the most distant traveller among the apostles, whose route is described to us, was St. Paul, we shall particularly (so far as our Map includes) accompany his excursions. The first is, that memorable journey of the Jewish Saul, from Jerusalem to Damascus, *Acts ix.* this, we presume, was performed along the ordinary road from Jerusalem: and tradition has marked by the name of Kocab (*Star*) the place where the super-celestial light was manifested to him: (for we do not reckon his being sent to Tarsus, chap. ix. 30. whence he was fetched by Barnabas, xi. 25.) The second is, *Acts xiii.* from *Antakia* (Antioch) to Seleucia, [meaning, no doubt, *Seleucia* on the coast near *Antioch*: our Map shews more than one Seleucia] to *Cyprus*, whence they went to *Salamis*; and through the isle, to *Baffo*, (Paphos) thence to *Perga* in Pamphylia; to Antioch in Pisidia; to *Konia* (Iconium) to *Lystra*, to Derbe. These cities, being situated in the province of Lycaonia, the inhabitants spake in the Lycaonian dialect, or "speech of Lycaonia." From Derbe the Apostles returned to *Lystra*, to *Konia*, Iconium, to *Antioch*,—to *Perga*,—Attalia—*Antalie*, and ended at *Antioch*, whence they had set out.

The reader will observe in this history two Antiochs, one in Syria, the other in Pisidia, which, in verse 21. is not distinguished by any addition.

The next chapter contains the mission of Paul and Barnabas from Antioch in Syria, to Jerusalem. They passed through Phenicia and Samaria; no doubt, pretty much along the coast, and as direct as they well could; which the reader will recollect is expressed by the words "passed through."

At the close of this chapter Barnabas sails to Cyprus:—Paul goes by land (north) from *Antakia* through Syria and Cilicia; he is said to go *through* Syria; though part of Syria was south of Antioch: he came to *Lystra*—passed *throughout* Phrygia, not meaning into *every* town of the province, but *generally*. The same, I suppose, of the limits, confines, or boundaries of Galatia: for, that he did not go *through* the province of Galatia, as he did the province of Phrygia, appears, by the insertion of the word rendered "*region*;" had he gone over both countries equally, and fully, it would have been said "he went throughout Phrygia and Galatia."

This is the first idea that strikes the mind on considering this phraseology: another is, whether the word *choran Galatiken* may not have somewhat of a diminutive sense here, and signify "*lesser Galatia*?"—not the whole province; in which case, the word rendered *region*, will signify the *champaign* parts (*field*, literally) of the province. In short, as we have in ancient geography, two Cilicias, *Cilicia Trachea*, and *Cilicia CAMPESTRIS*—"the field," so I suppose we have *Galatia Campestris*, χωρην. These remarks are introductory to the notice of a difficulty in the following words: "They were forbidden of the Holy Ghost to preach the word in *ASIA*:"—where was *this ASIA*? We know, that the word *Asia* signifies 1. the Continent: 2. the Peninsula, in our Map marked *ANATOLIA*: generally, 3. Proconsular Asia, the *western* coast of the Peninsula: 4. a small part on the river Cayster, is so called by Homer; to which, I think, we must add, 5. a district *EAST* of Phrygia: perhaps the east-
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ern part of that usually marked Galatia. For, observe 1. Paul had held an *eastern* course from Phrygia to Galatia *Campestris*, but had his design now been to have visited *western* Asia, this was absolutely contradictory. 2. He visited *western* Asia (Ephesus, Miletus, &c.) repeatedly ;—we can, therefore, assign no reason, why the Spirit forbade him so to do at this time. 3. After he had held a northern course toward Mysia, “he assayed to go (*eastward*, again) to Bithynia ;” but this *eastern* direction the Spirit suffered him not to take. It should seem, therefore, that his first intention was, to go *eastward*, (into Asia) which he resumed when in the latitude of Bithynia : but was prevented in both instances.

The apostle Peter’s Address of his first Epistle, we find inscribed to the residents “in *Pontus, Galatia, Cappadocia, Asia, and Bithynia.*” [Comp. Acts ii. 9.] By consulting the Map, we see that these provinces were *east* of the course of St. Paul : they are all marked in the Map, except *Asia* ; and it seems, on reflection, incredible, that Peter can mean to associate with provinces whose limits *touched each other*,—provinces, in fact, fairly considered as forming but one region, a distant province on the *western* coast of the peninsula ; wherein was Ephesus, and (the seven churches, &c.) in no part of which is any interference of Peter mentioned, or ever supposed to have taken place ; moreover, he must have crossed *Phrygia*, &c. to visit this *Asia* ; yet he inserts no saluting address to Christians there :—whereas, if we take the *Asia* of this verse in the Acts, and the *Asia* of Peter, to denote a country adjoining *Pontus, Galatia, Cappadocia, and Bithynia*, we see the intention of Paul very clearly ; with the reason why “the Spirit suffered him not” to execute it : *i. e.* the apostle Peter was engaged in the same important work, in those provinces, at this time ; so that, as Paul made it his principle to break up fresh ground, 2 Cor. x. 16, and as Peter was competent to the service, the labours of Paul were better directed elsewhere. This answers the long controverted question, what became of Peter after the council at Jerusalem ? We answer ; he first went to Antioch, where Paul withstood him, for his bias in favour of Jewish observances : and leaving that city (before Paul, I suppose) he preached in the provinces above recited. This gives an entirely new *tone* to the epistle of Paul to the Galatian churches. We are sure, that Peter held the same opinion as Paul,—that the Mosaic yoke should not be imposed on the Gentiles, Acts xv. 10. but, Paul extended his ideas much further, teaching that *Jews* also might dispense with the observances of their nation, Acts xxi. 21. that is, that those observances were *indifferent* ; accordingly, he sometimes observed them, sometimes not. On this question, James seem to have been *against* him, Acts xxi. 24. &c. Gal. ii. and no doubt Peter too :—in fact, this opinion (of the *ad libitum* state of Jewish converts) seems to have been what he communicated in *confidence* to the pillars of the church, Gal. ii. 2. However, Paul adhered to his persuasion ; for he circumcised Timothy who was of Jewish descent, Acts xvi. 3. but did not circumcise Titus, who was of Grecian descent : thus adapting his practice relating to things in his own judgment indifferent, to existing circumstances, or “becoming all things to all men.” Peter seems not to have been quite so free in his notions

notions as Paul; and this, at least may be said on his behalf, that the observance of Jewish national commemoration-services did no more prevent a Jew from believing in Christ for personal salvation, than an Englishman's commemorating Gunpowder treason, or the fire of London: and that, in respect to circumcision, it was long practised by the national church of the Jews,—the Nazarene Christians, who yet were believers in Christ; and it may be still retained, for aught I know, by some of the sects of Christians in the East. Possibly Paul's free sentiments are hinted at by Peter, 2 Epist. chap. iii. 16, where he speaks of things "hard to be understood" in the writings of Paul. But it often happens that SECONDARIES, in their zeal for opinions, outrun the intentions of their principal; and, if we allow due force to this idea, it may furnish the true import of certain expressions in the Epistle to the Galatians. This is not the place to enlarge on the subject; yet a thought or two may explain our meaning. "I marvel ye are so soon removed to *another* gospel," as under the appearances you give it, it seems to be; "yet which is not another" in reality, for Peter and I agree in gospel principles: but, if Peter himself, or an angel from heaven, preached another gospel, let him be accursed:—for do I seek to please men (apostles? Peter?) or God? &c.—I went to see Peter, and abode with him a fortnight . . . during my residence false brethren were brought in, to whom on that occasion we gave no place—but James, PETER, and John, who were pillars, seeing that the gospel of the uncircumcision was committed to me, (in which gospel I instructed you Galatians) as the gospel of the circumcision was committed to Peter, which is not "*another* gospel" but the same, and founded on the same faith, they approved my principles. Nevertheless when Peter was come to Antioch, I withstood him, for inducing Gentiles to live as do the Jews; and Peter so far acquiesced in my reasonings as to leave the Gentiles at their liberty; now, if I build again the things which I then destroyed, (as Peter would do, should he re-establish distinctions which he formerly abandoned) I make myself a transgressor; for, I was either wrong *then* in destroying them, or I am wrong *now* in re-establishing them." Such seem to be the sentiments of the Apostle.

These allusions to Peter, agree well with the notion, that some who derived authority from him, had been incautiously busy in Galatia; they boasted that *they* had received their gospel from some great (apostolic) man, which Paul had not (chap. i. 11.); that Paul was no *apostle*, (chap. i. 1.) which indeed he was not, in the sense they intended; *i. e.* not one of the twelve, as Peter was, &c. Many other hints might be added. But, let us note the date of this epistle; on which our remarks have great influence. After having examined what has been said on this subject, by Lardner, Doddridge, Mill, &c. I incline with Michaelis, to place this as the *very first* of St. Paul's writings; and suppose that after the council at Jerusalem, Peter visited Antioch, during Paul's residence there, which after a while he quitted, to go into Pontus, &c. Afterwards Paul also quitted Antioch, to go into Phrygia, and Galatia *Campestris*, and prolonged his journey over into Macedonia; while on this journey, he is informed of the opinions propagated by those who *exceeded* Peter's instructions; and against

those *excesses* he writes to his Galatian converts,—appealing to recent occurrences in proof of the constancy of his own sentiments.

This supposition might be sustained by many other arguments; but, these are sufficient to shew that the *Asia* of this passage, and the *Asia* of Peter, i. 1. was *east* of the course of Paul's journey; which is our *Geographical* object.

Verse 8. *And they passing by Mysia*, rather crossing Mysia, *came down to Troas*—whence they passed over to Macedonia: in this passage our Map quits them;—but, I cannot help observing on the word *passing BY*, that it looks as if they went on *one side* of Mysia; which in reality they did not; for the same word is used chap. xx. 16, of *sailing BY* Ephesus, which, in the sense of going *BY*, i. e. *through* it, they did not; but stood off from that city.

Our Map resumes this journey of the apostle Paul, at his return from Corinth and Cenchrea, to Ephesus, in *western* Asia; whence he sailed to Cesarea, (Keisarieh) “and went up, and saluted the Church;” not the church at Cesarea, but that at Jerusalem, “the Church,” by eminence; in conclusion he went down to Antakia, (Antioch,) whence he had begun his journey. “And after he had spent some time there, he departed and went over in an orderly manner the (*plain*, or) *champaign* Galatia, and Phrygia; taking Galatia first, not endeavouring to visit (eastern) Asia now, but going along the *upper coasts*, i. e. along Mysia by Troas, Pergamos, Smyrna, &c. &c. he came to Ephesus, and dwelt there two years, (verse 10.) so that all who dwelt in Proconsular, or *western* Asia, heard the word. From Ephesus he went into Greece, and proceeded northwards, into Macedonia; from Macedonia he came again into *Asia* (the peninsula); from Philippi to Troas; from Troas to Assos, (part of the company by sea, part by land) from Assos by Chios, Samos, Trogyllium, to Miletus (sailing *BY*—i. e. not stopping at, Ephesus): at Miletus he sent for the elders of Ephesus. [On the subject of *Miletus*, I may here observe, that, beside this *Miletus*, there was *another* in Crete;—and a *third* in Attica, which commentators have taken no notice of, being ignorant of it: and yet, it deserves consideration, whether this was not the *Miletus* at which Trophimus was left sick. For that was not *Miletus* near Ephesus; as is agreed by all who think on the subject; and that it should be *Miletus* in Crete is attended with great difficulties.] The small distance from Miletus to Ephesus, will be noticed by the reader. From Miletus they sailed by Coos, Rhodes, Patara; leaving Cyprus on the left hand, to *Sour* (Tyre); from Sour to Chau Pelerin, (Ptolemais,) and *Keisarieh*, from Keisarieh to Jerusalem, *Acts* xxi. 17.

The last voyage of St. Paul is to Rome; part of which is shewn in our Map, *Acts* xxvii. From *Keisarieh* to *Seidé*, to Cyprus, the sea of Cilicia, Pamphylia, Myra in Lycia, Cnidus, Crete.

Our Map concludes before we accompany the Apostle so far: and here, we too, conclude our illustrations of the Voyages of Scripture. The reader will judge from this specimen, of the accuracy with which St. Luke's journal of his gospel travels was kept; and since we find the utmost regularity wherever we trace

trace him, we may safely consider him as a writer of unexceptionable correctness, in his history of events, wherein we have no such means of examining his narration. This idea is independent of, but not inconsistent with, the principle of inspiration communicated to our sacred historian.

I shall, however, mark the situations of the seven churches of (western) Asia, of which we read in the Revelations: tracing them according to the order of the extract in FRAGMENT, No. 328, as they were visited by the writer of that journey. The reader will see by the situation of the Isle of Patmos, how well it was placed for corresponding with these cities.

1. *Smyrna*: in this city is the principal factory of European commerce. 2. *Bergameh*, the ancient Pergamos. 3. *Thyatira*, now *Ak-hissar*, "the white castle." 4. *Sart*, the ancient Sardis. 5. Philadelphia, now *Alacheher*, "the fair city." (*Colosse*, is the present *Konos*) 6. *Laodicea* "is now utterly desolated, without any inhabitants, except wolves, jackalls and foxes; it stands about the place marked*." 7. Ephesus, formerly a city of great dignity and consequence.

Thus have we connected many Scripture occurrences, we hope with correctness, certainly not without labour, and here we terminate this division of our subject.

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We take this opportunity of suggesting the further utility of Maps, when *prophecy* relating to the countries they represent is in question, no less than on matters of fact, of which they have been the scenes. We hinted on *Gen. xli. 5. EXPOS. INDEX.* on the resemblance in form between the seven-eared wheat of Egypt, and a map of the Nile; that the seven mouths of that river corresponded to the seven ears of the wheat, as the seven bullocks did to seven ploughing seasons, which came up out of the river, *i. e.* from its annual inundation: and wherein, even the *trefoil* on which these bullocks fed, might have its import, (whether implying a fattening on the natural productions of the land, during three years; or, on *stored* supplies, as *trefoil* is three years in coming to perfection.)

It is well known too, that the pious and learned Mr. KING, has lately proposed to explain the passage, *Isaiah xviii.* of the "land shadowing with wings," by means of a Map of a country whose Geographical form should correspond to the figure of wings. One would suppose, that some commentators had indulged the same fancy on the subject of Nebuchadnezzar's dream, of the Image whose head was of gold, his arms of silver, his belly and thighs of brass, his legs of iron, and his toes of mingled iron and clay, *Dan. ii. 36, &c.* for they consider Babylon as the head; Media and Persia as the shoulders; Greece as the body. (which is far *west*); Rome as the legs, (still further *west*); and the ten toes as the ten kingdoms of the Roman (*western*) empire; including even France; and the *western* islands of Britain. It is true, that we have lately seen the Map of England crumpled into the shape of a woman riding on a fish; and that of France, in the form of a ship in distress; (published during the Revolution

Revolution in that country.) Such *anamorphoses* might be known to Daniel; but, I take this opportunity of doubting very strongly, whether any part of this Image should be extended out of the empire of Nebuchadnezzar; for if so, why add the vision of the four Beasts? and why reveal to Nebuchadnezzar, what in no wise concerned him, or his kingdom? I presume, therefore, to think, that the first vision, that of the Image, referred to the *political* person (realm) of Nebuchadnezzar; and should be restricted to that empire of which Babylon was the head: that the second vision of this king, that of the Tree, referred to the *human* person of Nebuchadnezzar, and to events accomplished in himself: whereas, the vision of the four Beasts was a revelation to the prophet, not to the statesman; not to the king's attendant, but to a person commissioned to write for general instruction and general advantage. I think too, the prophet seems to be transported from Shushan, or from Babylon,—from his customary residence—to “the great sea,” the Mediterranean, where he was much about midway between the eastern beast (Babylon) and the western beast (Rome) so that he might readily be supposed to refer to both, being so situated as to observe them both; independent of the circumstance of his seeming to himself to be hereby stationed in his native country, the Holy Land of Israel, which I think he is not in any other of his visions.

If this principle be admitted, it corrects the representation of Bishop NEWTON on the Prophecies (who has indeed herein followed the opinions of others) that the toes of the image are the kingdoms into which the (*western*) Roman empire was broken, Vol. I. p. 385. I agree, that Babylon is the golden head, [crown? or rather, *casque*, if we suppose this figure to have been in armour; like certain statues of the god *Bel*: which is not improbable. *Vide* FRAGMENT, No. CVIII.]—the breast and arms (*i. e.* the pieces of armour which covered the belly, and hung down over the thighs; and which in the Roman armour was formed into labels) of brass, are the empire of Alexander; who made Babylon the seat of it, himself, and whose successors maintained their power in these countries: but, I would not go out of Asia for the two thighs of brass (as is usually done, taking *Egypt* for one) I would rather take the Grecian empire of Babylon under Seleucus for one, and the Syrian under Antigonos, for the other. Theodorus, and the Parthians under Arsaces, established themselves in the eastern part of the dominions of Nebuchadnezzar; as, after a time, did the Romans in western Asia. To the Parthian empire the Persian has succeeded, east of Babylon: and the Turkish, to the Roman, west of Babylon; so that no power rules (or has for a long time ruled) at the same time over *both* these districts of the ancient Babylonish dominion. Moreover, we are assured by every traveller who passes through these countries, that the governing power is felt by the inhabitants as iron which tramples on (themselves) the clay; under pretence of protecting it; much as the armour on the feet, (*Vide* the Plate of Armour in CALMET, FRAGMENT, No. CCXVIII. No. 2.) of a soldier may be made of iron; yet does not combine with the foot it covers; or as iron plates may have clay between them, yet these substances do not coalesce. That there exists no more union between the inhabitants of these parts of the Turkish dominion,
and

and those who govern them, than between iron and clay is notorious, from the general disposition of the country to revolt, in case the late bold attempt of BONAPARTE to upset the Turkish power had not been stopped by the providential repulse he received from SIR SYDNEY SMITH at Acre.

I conceive, therefore, that the state of the Turkish power in these countries cannot be better (metaphorically) expressed than by the words of the prophet, "*And as the toes of the feet were part of iron and part of clay, so the kingdom shall be partly strong and partly broken. And whereas thou sawest iron mixed with miry clay, they, the governors, shall mingle themselves (by connexions, marriages, &c.) AMONG the seed of (Anusha) LOW MEN, as the inhabitants shall be esteemed; but they the governors and governed shall not cleave one to another, shall not coalesce, even as iron is not mixed with clay.*" How exactly this is the case wherever the Arabs are under the yoke of the Turks [the same in Egypt, also in Greece] is too notorious to require a word in proof of it: and could we obtain equal information in respect to Persia, we should discover precisely the same in that country, as appears from the relation of HANWAY, who, unhappily for himself, found the Persian peasants too ready to revolt against their then despot—the famous Nadir Shah.

The reader will understand then, that I refer, as is usual, to the Roman empire as a part of this figure, but only to the *eastern* part of the Roman power, excluding all *western* dominion whatever. This principle is supported no less than others appear to be, by those ancient interpretations which refer to the Romans (as Jerom and others) but does not allow that comparison between the *ten* toes of this image, and the *ten* horns of the fourth beast in chap. vii. to which commentators have usually had recourse: but I consider them as subjects entirely independent of each other, and to be explained by independent history accordingly.

The present state of the countries which compose our Map would be a very fruitful source of remark, and many corroborations of the truth of Scripture prophecies would arise from the consideration of it: but it is not our present intention to enter on that subject: we conclude these remarks by submitting them to the *candour* of the reader. We have added a list of most of the places inserted in our Map, with slight hints on their principal distinctions.

List

List of the PRINCIPAL PLACES contained in the Map of GEOGRAPHICAL ILLUSTRATIONS.

IT may be remarked, that the present names of these towns, and cities, is inserted in this Map, rather than what are adopted in reference to the same places, by our public version; partly, to counteract the effect of certain errors in our pronunciation, (as Gericho for Yericho—*Eriha* in our Map, &c.) and partly, because, by means of these names, an idea may be obtained of the pronunciation of the ancient Hebrew language: most of these appellations being the same, and spelled in the same manner, as they were in the days of Old Testament writers. Many towns are inserted, only because they bear the name of some person mentioned in Scripture, and may conduce to point out his residence, or that of his posterity.

In considering this Map, the reader will divide it, by his eye, into portions: fixing his attention well on, *first*, the EASTERN division, Persia and Babylon; *secondly*, the CENTRAL division, Mosul, or Nineveh, and its dependencies, the passage from thence; *thirdly*, the SYRIAN division, including Palestine; and *fourthly*, the Peninsular division, or ANATOLIA: which might indeed be called the Apostolic division. The Scripture history of events will thus contribute to confirm the ideas received by the Map.

A

- ABEL, lat. 33. 40.
 ACRE, lat. 33. formerly *Acco*, a sea-port on the Mediterranean: famous for the repulse of Bonaparte by Sir Sidney Smith.
 AINTAB, lat. 36. 35.
 ANTAKIA, *Antioch*, in Syria, N. lat. 36. 30. long. E. 36. 40. the seat of a very flourishing Christian church under the apostle Paul, and others, *Acts* xiii.
 ANTIOKETA, or lesser Antioch, a port in Cilicia Trachea, on the Mediterranean.
 ANTALIA, formerly Attalia, in Pamphylia, lat. 36. 50. visited by St. Paul, *Acts* xiv. 25.
 ANAH, on the Euphrates, lat. 34. 10. Might this be founded by Anah, *Gen.* xxxvi. 24?
 AIO-ZO-LUK, the ancient Ephesus, in Lydia, lat. N. 38. long. E. 27. 30. on the western coast of Asia Minor: famous for being visited by St. Paul, for a letter from him, and for being the later residence of the apostle John: from whom its present name is thought to be derived, though strangely disfigured.
 AKRAD, lat. 34. 20.
 ARKA, lat. 34. 30.
 AMMAN, in Syria, north of Maab, probably an ancient residence of the children of Ammon, *Gen.* xix. 38.
 AKCHEHER, lat. 33. 30.
 ALACHEHER, the white castle, lat. 38. 20.
 ANATOLIA, a peninsula, otherwise called Asia Minor.
 ARABIA, an extensive country between Syria and Irak, or Chaldea.
 ARZ-ROUM, on the Euphrates, lat. N. 39. 56. long. E. 42. for a conjecture that the prophet Ezekiel resided here: and for some account of the scarcity of wood here, *vide* FRAGMENT, No. CVI. p. 9.
 ASHDOD, *vide* EZDUD.

- ASIA MINOR. 1. ANATOLIA; 2, the provinces of Lydia, Caria, and Lycia, lat. N. 35 to 40. long. E. 45. 46. Another Asia, seated near Galatia and Pontus: east of the former.
 ASKALAN, lat. N. 31. 50. a sea-port on the Mediterranean.
 AZOTUS, *vide* EZDUD.

B

- BAALBEC, in Syria, lat. N. 33. 30. long. E. 37. supposed to be the ancient Heliopolis, or City of the Sun.
 BABIL, formerly Babylon, on the Euphrates, lat. N. 32. 30. long. E. This city is ruined; but its underground constructions testify its ancient greatness.
 BAFFO, the ancient Paphos, in Cyprus, lat. N. 34, 50.
 BAGDAD, on the Tigris, lat. N. 33. in some sense a successor of the ancient Babylon.
 BANIAS: not far distant stood the town of Dan: this is the ancient *Paneas*, on the Jordan, lat. 33. 10.
 BAZRA, in Babylonia, on the Euphrates, lat. N. 30. 45. long. E. 47. Probably famous for its manufactures of dyed garments, *Isaiah* lxiii. 1.
 BERGAMEH, the ancient Pergamos, in Asia Minor, lat. N. 39, 40. To the church here, a letter, *Rev.* ii. 12.
 BERUT, anciently Berith, or Berytus, a sea-port on the Mediterranean, lat. N. 33. 40. long. E. 36.
 BETHLEHEM, in Judea, south of Jerusalem, lat. N. 31. 30. long. E. 35. 25. famous for being the birth-place of the Messiah.
 BOZRA, in Arabia, near Syria, lat. N. 32. 20. probably referred to in some of the prophets, as *Jer.* xlviii. 24, and elsewhere.

C.

C

CARCHEMISH, *vide* KERKISIA.
 CATIEH, or *Catjeh*, the mount Cassius of *Cant.* iv. 2. on the coast between Judea and Egypt.
 CHOARA, in Media, supposed the *Hara* to which the Jews were carried captive, *2 Kings*, xvii. 35. 40.
 COLOSSE, *vide* KONOS.
 CHAU PELERIN.

D

DEMESK, formerly Damascus, in Syria, lat. N. 33. 15. long. E. 37. This city claims Abraham for its founder. *Vide Gen.* xv. 2.
 DERBE, in Pisidia, in Anatolia, mentioned *Acts* iv. 6.
 DUMAR, *q.* the ancient Duma? *Isaiah* xxi. 11. It is probable that the *Duma* of *Isaiah* is Edom, under a provincial pronunciation: but the *possibility* that it might be this city is suggested, as learned men have been at a loss to find it.

E

ERIIA, formerly Jericho in Judea, west of the Jordan, lat. N. 32. long. E. 35. 30. famous as the city of palm-trees, *2 Chron.* xxviii. 15.
 EL ARISH, or *la Rissa*, (in CALMET) on the coast between Judea and Egypt, lat. 31. supposed to be the southern limit of the kingdom of Judah.
 EL BIR, on the Euphrates, lat. N. 36. 36. the customary passage of this river.
 EL DER,
 EL ERSI,
 EPHESUS, *vide* AIO-ZO-LUK,
 ERVAD, supposed the *Arpad* of *2 Kings* xviii. 34. *et al.* (usually associated with Hamath,) a port on the Mediterranean, lat. N. 34. 55. Sennacherib boasts of having taken this city.
 EZDUD, the ancient Hebrew Ashdod, the Azotus of the Greek Scriptures, in Judea, lat. N. 31. 50.

F

FARS, otherwise Persia—the Pers, or Peres of the Hebrew Scriptures. A province, or kingdom, east of the Tigris.

G

GEBILEH, *q.* whether the ancient city from whence came the *Giblim*: *Ezek.* xxvii? lat. N. 35. 20. It is probably too far north, and the *Giblim* may be sought at *Jibiel*, nearer to Tyre and Sidon, both towns being ports on the Mediterranean.

H

HALEP, or Aleppo, supposed to be the ancient Zobah. lat. N. 35. 45. long. E. 37. 25. One of the most considerable cities of this country, at present.

HAMADAN, the ancient Ecbatana, to which city the Jews were carried captive. lat. N. 35. 5. It was a royal city.

HAMAH, the entering in, *i. e.* to Syria, lat. N. 34. 50. The northern boundary of the land of Promise.

HALAH, in Media, *vide* KALAR.

HARA, *vide* CHOARA.

HARAN, in Mesopotamia, lat. N. 36. 40. In the road from Nineveh to Canaan.

HEBRON, in Judea, south of Jerusalem, lat. N. 31. 43.

HIT, on the Euphrates, lat. N. 33. 20. here are the bitumen pits, whence was supplied that “slime” used in constructing the walls of Babylon.

I

JAFFA, formerly Joppa, a port in Judea, on the Mediterranean, lat. N. 32. 5. famous for the escape of Jonah, and the visit of Peter.

ICONIUM, *vide* KONIA.

JEBEIL, whether the *Giblim* from hence; *Ezek.* xxviii. ?—more probable than from *Gebileh*, further north. Its inhabitants were excellent mariners, lat. N. 34. 20. long. E. 36. 13.

JERICO, now Eriha; which see.

JERUSALEM, the capital of Judea, lat. N. 31. 40. long. E. 35. 25. probably a very ancient city, famous as the capital of the kingdom of the Hebrews; and as the scene of the sufferings and death of the Messiah.

ISPAHAN, lat. N. 32. 25. lon. E. 52. 55. the capital of Persia, one of the towns to which the Jews were carried captive.

JUNDI SAPOR, in Khozistan, or Chuzestan—probably the ancient Shushan royal, of Esther and Daniel.

K

KALAR, in Media, lat. N. 36. 20. probably one of the towns to which the Jews were carried captive, *2 Kings*, xvii.

KARAHISSAR,

KERKISIA, the ancient Carchemish, on the Euphrates, lat. N. 35. 20.

KERKOUK,

KEISARIAH, in SYRIA, a sea-port on the Mediterranean, lat. N. 32. 20. the seat of the Roman governors of Judea.

KHOZISTAN, or Chuzestan *i. e.* the province of *Shusa*, in Persia, lat. N. 30 to 33. long. E. 47 to 49.

KILIS,

KIR, or Kyrus, river, runs into the Caspian sea, most probably a province of the same name, adjacent.

KOCAB, or *Cocab*, “the star:” supposed the place where St. Paul was converted, in his journey to Damascus, *Acts* ix.

KONOS, formerly *Colosse*, to the converts of which city St. Paul wrote an epistle. lat. N. 38.

KONIA, formerly Iconium, in Phrygia, lat. 38.

KORNA, the horn, *i. e.* the junction of the two rivers Tigris and Euphrates.

M

MAAB, or El Rabba, in Arabia, lat. N. 31. 20.

This city appears still to retain the two names by which it is known in Scripture:—1. Moab. 2. Rabbah of the Moabites. This was the royal city, taken by David, 2 *Sam.* xi.

MEMBIGS, Capt. Wilford supposes this to be a corruption of Maha-baga, the great goddess: and thinks it might be anciently called Niniveh.

MOSUL, formerly Nineveh, on the Tigris, lat. N. 36. 32. For a still more ancient Nineveh, *vide* BELAD. For an account of the heat of this city, &c. *vide* FRAGMENT, No. III. p. 8, 9.

N

NABOLOS, or Naplouse, in Syria, the ancient *Samarina*, lat. N. 32. 20. A colony of Samaritans, descendants of those anciently settled here, is still extant in this town.

NESIBIN, in Mesopotamia, lat. N. 37. in the direct road from Nineveh to Syria.

NINEVEH, *vide* MOSUL.

R

RACCA, lat. 36.

RAGES, the modern Rey, in Media, lat. 35. 35. best known by the history of the journey of Tobias, as one of those cities which contained captive Israelites.

RAS-AIN, the ancient Resen, in Mesopotamia, on a branch of the Euphrates, lat. N. 36. 35.—It is remarked as a very great city, *Gen.* x.

RAMLA, the ancient *Rama*, in Judea, lat. N. 32.

REFAH,

RESAPHA,

ROHA,

RHODES, an island on the coast of Asia Minor, in the Mediterranean, lat. N. 36. 20. long. E. 28. This city is famous for its Colossus, and its defence against the Turks by the Knights Hospitallers (now *i. e.* lately, Knights of Malta.)

S

SALAMIS, in Cyprus, on the eastern shore of that island, lat. 35. 30.

SAFET,

SART, the ancient *Sardis* in Lydia, lat. 38. 30. A letter to this church, *Rev.* iii. 1.

SEIDE, the ancient *Sidon*, on the coast of the Mediterranean, lat. 33. 15.

SELEUCIA, a small town near Antakia: being a port on the Mediterranean, lat. 36. 10. From hence Paul and Barnabas sailed for Cyprus, *Acts* xiii. 4.

SELEFKEH, formerly Seleucia, a sea-port on the coast of Cilicia in the Mediterranean, lat. 36. 40. It gave name to the sea of Seleucia, *Acts* xxvii. and must be distinguished from the Seleucia near Antakia, *Acts* xiii. 4.

SERUG,

SMYRNE, a sea-port on the western shore of Anatolia, lat. N. 38. 28. long. E. 27. 24. famous for a letter addressed to it, *Rev.* ii. 8. and for preserving a small remnant of a Christian church.

SOUR, the ancient Tzur, or Tyre: a famous port on the Mediterranean, lat. N. 33. long. E. 36.

SUSUM,

T

TABARIA, formerly Tiberias, on the sea of Tiberias, in Syria.

TADMOR, or Palmyra, in the desert of Syria, lat. N. 34. long. E. 39. said to be built by Solomon. This city was at once a famous mart, and a royal city: it has some superb edifices in witness of its former grandeur.

TARSOUS, in Cilicia, a port on the Mediterranean, lat. 36. 50. famous for being the birth-place of the apostle Paul.

TIGRIS river, the eastern branch of that stream of which the Euphrates is the western; the province between them is called Mesopotamia: "between the rivers." Its present name (its ancient name also probably) is Digel.

TOSTER,

TYRE, *vide* SOUR.

Y

YABNE, lat. 31. 50.

Z

ZAN, in Egypt, lat. 30. 50. is the *Zoan* of *Numb.* xiii. 22. probably: at which time it was watered by numerous canals. These have since proved its ruin, as the waters of the lakes, &c. adjacent, have inundated all around it.

ZOAR, a small town at the southern extremity of the Dead Sea, in Judea, lat. 30. 50. Perhaps the Zoar of *Gen.* xiv. 2.



THE SCORPION.

THERE seems to be no doubt whether the Hebrew word *okrab*, means a Scorpion. The figure of this insect is submitted to inspection above; but the history of it should be known, in order to understand justly the force of passages where it is mentioned. The reader will observe particularly its articulated tail, at the end of which is the sting; and its pincers, or claws, in front, like those of a lobster. "In the tropical climates it is a foot in length. No animal in the creation seems endued with such an irascible nature. When taken, they exert their utmost rage against the glass which contains them: will attempt to sting a stick, when put near them; will sting animals confined with them, without provocation; are the cruelest enemies to each other. Maupertuis put a *hundred* together in the same glass; instantly they vented their rage in mutual destruction, universal carnage! in a few days only *fourteen* remained, which had *killed and devoured* all the others. It is even asserted, that when in extremity or despair, the scorpion will destroy itself. It is said to be a common experiment in Gibraltar, [and Goldsmith says he had been assured of such a fact, by many eye-witnesses,] to take a scorpion newly caught, and surrounding him with burning charcoal, when he perceives the impossibility of escaping, he stings himself on the back of the head, and instantly expires." Surely Moses very properly mentions *scorpions* among the dangers of the wilderness! Deut. viii. 15. And what shall we think of the hazardous situation of Ezekiel, who is said to dwell among *scorpions*? chap. ii. 6.—people as irascible as this venomous insect. Could a fitter contrast be selected by our Lord—"will a father give a scorpion to his child instead of an egg?" Luke xi. 12.

But the passage most descriptive of the scorpion is Rev. ix. 3, 4, 5, 10. which mentions,—locusts, having power as scorpions; not to kill men, but to torment them, during five months—with the torment of a scorpion when he striketh a man: they had tails like scorpions, and stings in their tails. Contrary to the nature of locusts, they were not to destroy vegetation, but to infest men.

REVELATIONS ix. 3, 4, 5. 10.

Several

Several particulars deserve notice:—1st. These scorpions have the power of flying. The ancients certainly ranged an insect of some kind, as a *flying scorpion*. *Lucian* says (in the *Dipsades*,) “There are two kinds of scorpions, one residing on the ground, large, having claws, and many articulations at the tail; the other flies in the air, and has inferior wings, like locusts, beetles, and bats.” *Strabo*, lib. xvi. reports, that in Mauritania, are found many *flying scorpions*; others without wings.” *Scheuzer* mentions other testimonies. It is probable, therefore, that the ancients called that a “flying scorpion,” to which the moderns have given some other name.—2d. They did not kill men, but only torment them. It is not every scorpion the sting of which is fatal. In Europe they are seldom deadly, though always dangerous. “In some of the towns in Italy, and in the south of France, it is one of the greatest pests that torments mankind; yet its malignancy in Europe is trifling, compared to its powers in Africa and the East.” *Maupertuis* caused a dog to be stung—it died: another dog did not die, though more severely stung, in appearance: and it seems to be generally true, that the sting of the old ones are the most dangerous; and during the heat of summer; which agrees with,—3d. the *five months* of the *Apocalypse*: that this was known to the ancients we have the evidence of *Tertullian*, who says, “The ordinary time of danger is during the heats; the winds of south and south-west, excite its fury:” and *Macrobius* says, (*Sat. lib. i. cap. 21.*) “The scorpion slumbers during winter; but when winter is over, its sting resumes its vigour, of which winter had not deprived it.”—4th, The torment of a scorpion when he striketh a man, is thus described by *Dioscorides*, lib. vii. cap. 7. “When the scorpion has stung, the place becomes inflamed, and hardened; it reddens by tension, and is painful by intervals, being now chilly, now burning. The pain soon rises high, and rages, sometimes more, sometimes less. A sweating succeeds, attended by a shivering, and trembling; the extremities of the body become cold; the groin swells; the bowels expel their wind, the hair stands on end; the members become pale, and the skin feels throughout it the sensation of a perpetual pricking as if by needles:”—such are the torments of a scorpion when he striketh a man!—5th, As to the formation of the tail, and the sting at its point, the reader is referred to the figure. It remains only to be observed, that the ancients had remarked this particularity. So *Julian*, (*Epig. on the Heavenly Signs*,)

Libra subit, caudaque animal quod dirigit ictum.

So speaks *Hilarius*:

Libraque lance pari, & violentus acumine caudae.

And to these we may add *Eusthenius*,

Momentumque sequens, caudaque timendas adunca.

On the whole, we observe, that however metaphorical is the description of this depredator, by the *Apocalyptic* writer, yet that the foundation of his description may readily be discovered in nature; and will be best understood by those who best know the subject.

THE DRAGON, SEA-SERPENTS, AND FLYING SERPENTS.

IT appears, from several places in this work, that if those numerous *Dragons* which occur in our public translation, have not been annihilated, yet, they have been changed for creatures of very different kinds; it is therefore, in some degree, incumbent on us to identify, so far as our information reaches, the true intention of the term *Dragon* in Scripture: and to be certain of our instance on this subject, we select that of the "great red Dragon" of the Revelations, which also is expressly called a *serpent*. Chap. xii. 3, "Behold, 1. a great, 2. red dragon, δράκων—3. having seven heads, and, 4. ten horns;—his tail drew the third part of the stars of heaven;—the Dragon stood before the woman to devour her child—and the—οφις, serpent, cast out of his mouth water as a stream [flood] after the woman, that he might cause her to be knocked down—carried away—by the stream of water." The description and manners of this dragon have greatly embarrassed commentators. Dr. DODDRIDGE observes on the passage, "I suppose most of my readers well know, that a Dragon is a vast serpent of enormous bulk. *Job*, the celebrated African, assured me, that one of them carried away a live cow in its mouth, before his face." But, on this serpent's ejection of water, he professes his "ignorance of any fact to illustrate it."

I shall observe on the particulars of this dragon in their order.

1. The dimensions of this dragon—"great." The counterparts of this reptile must be sought among serpents of the largest size; for which we look to that class called by naturalists, *Boa*.

The Dragon is frequently mentioned by ancient naturalists: by Aristotle, lib. ix.; Diod. Sicul. lib. iii. &c. St. Ambrose, *de Mor. Brach.* p. 63, says, there were Dragons seen in the neighbourhood of the Ganges, near seventy cubits in length. Alexander and his army saw one of this size in a cave, to their great terror. *Eliau*, lib. xv. cap. 21.

Three kinds of Dragons were formerly distinguished in India. 1. Those of the hills and mountains; 2. those of the valleys and caves; 3. those of the fens and marshes. The first is the largest, and covered with scales, as resplendent as burnished gold. They have a kind of beard hanging from their lower jaw, their aspect is frightful, their cry loud and shrill, their crest bright yellow, and they have a protuberance on their heads the colour of a burning coal. [The reader will turn to what we have related of the *Naja*, or Spectacle-serpent, on Isaiah xi. *in loc.* and plate.] 2. Those of the flat country are of a silver colour, and frequent rivers, to which the former never come. 3. Those of the marshes are black, slow, and have no crest. *Strabo* says, that painting serpents with wings is contrary to truth; but other naturalists and travellers, ancient and modern, affirm that some species are winged. [There is much confusion on this subject. Some have mistaken the hood of the *Naja* for wings; others for a crest; others have confounded the innocent lizard-dragon with flying serpents; and therefore report, as *Pliny* does, that their bite is not venomous, though the creatures be dreadful; which indeed is true of the *Boa*, or proper dragon.]

REVELATIONS, Chap. xii. 3.

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The following is mostly translated, or abstracted, from Count DE LA CEPEDE. The BOA is among serpents, what the lion or the elephant is among quadrupeds; he usually reaches twenty feet in length, and to this species we must refer those described by travellers, as lengthened to forty or fifty feet, as related by *Owen, Nat. His. Serp.* p. 15. *Kircher* mentions a serpent forty palms in length; and such a serpent is referred to by *Job Ludolph*, p. 166, as extant in Ethiopia. *St. Jerom*, in his life of *Hilarion*, denominates such a serpent, *draco*, a *Dragon*; saying, that they were called *Boas*, because they could swallow (*boves*) beeves, and waste whole provinces. *Bosman* says, entire men have (frequently) been found in the gullets of serpents, on the Gold Coast; but, the longest serpent I have read of, is that mentioned by *Livy*, and by *Pliny*, which opposed the Roman army under *Regulus*, at the river *Bagrada* in Africa. It devoured several of the soldiers; and so hard were its scales, that they resisted darts and spears: at length it was, as it were, besieged, and the military engines were employed against it, as against a fortified city. It was an hundred and twenty feet in length. Its skin was sent to Rome as a trophy, and was preserved in one of the temples there. *Pliny*, lib. xxviii. cap. 14.—Add the following testimonies:

“At *Batavia* was once taken a serpent, which had swallowed an entire stag of a large size: one taken at *Banda* had done the same, by a negro woman.” *Baldeus*, in *Churchill*, Vol. III. p. 732.

“*Leguat* in his Travels says, there are serpents fifty feet long in the island of *Java*. At *Batavia* they still keep the skin of one, which though but twenty feet in length, is said to have swallowed a young maid whole.” *Barbot*, in *Churchill*, Vol. V. p. 560.

“The serpent *Guaku* or *Liboya*, [boa] is questionless the biggest of all serpents; some being eighteen, twenty-four, nay, thirty feet long, and of the thickness of a man in the middle. The Portuguese call it *Kobre de hado*, or the Roebuck-serpent, because it will swallow a whole roebuck or other deer; and this is performed by sucking it through the throat, which is pretty narrow but the belly vastly big. Such an one I saw near *Paraiba*, which was thirty feet long, and as big as a barrel. Some negroes accidentally saw it swallow a roebuck, whereupon thirteen musqueteers were sent out, who shot it, and cut the roebuck out of its belly . . . It is not venomous . . . This serpent, being a very devouring creature, greedy of prey, leaps from among the hedges and woods, and standing upright on its tail, wrestles both with men and wild beasts: sometimes it leaps from the trees upon the traveller, whom it fastens on, and beats the breath out of his body with its tail.” *Nieuhoff*, in *Churchill*. Vol. II. p. 13. [Compare *Trans. Edinb. Royal Society*, Vol. VI.]

2. I would call the attention of the reader to the immense serpent of *Regulus*, especially, because there is a strong probability that it might have been in the mind of the writer of the Revelations; who, as we have seen, describes a power most terribly distressing, under the figure of a *Dragon*: a *red dragon*. On which observe, 1. That the *Dragon* of antiquity was, no doubt, a prodigious serpent, such as is described in the foregoing extracts; for which acceptation
serpent,

Jerom's authority may be at present sufficient. 2. That the colour most conspicuous in the great *Boa* is RED, which is very handsomely formed into figures, and composes a beautiful maculated *pattern*; so that the idea of *red* (but not exclusively *blood-red* in this instance) is drawn from nature; and perhaps the colours of some individuals of this species may be of a deeper red, than those of others. It is impossible to convey the idea of this redness, and its application to the *Boa*, without colours; but, so far as I recollect, the redness is rather that of bricks than of blood. Our extracts assert, that this serpent strikes vehemently with his tail; according to the representation of the apocalyptic writer.

3. As to the *seven heads* of the great red Dragon, it is well known, that there is a species of snake called *amphisbenæ*, or double headed—but, the *apparent* heads of this snake are, one at each end of him, and one of these is *apparent* only, not real. There is, indeed, a kind of serpent which is so often found with *two heads growing from one neck*, that some have fancied it might form a species, but we have as yet no authority adequate to that effect. It follows that the number of heads is entirely allegorical; but this allegory in the apocalypse is not absolutely singular, if [*Æsop's?*] fable of the dragon having seven heads, compared with the dragon having seven tails, were extant anciently.

4. The *ten horns* of this Dragon must be allegorical also.

5. The *flood of water*, ejected by this Dragon, is extraordinary, no serpent being known that has any receptacle for containing such a provision: the nearest approaches toward it, which I have been able to find, are the following:

Beverley, in his account of Virginia, mentions, pressing the roof of the mouth of a rattle-snake, whose head was recently cut off, and the venom *spurted out like the current of blood in blood-letting*.

Gregory, the friend of Ludolph, says, *Hist. Ethiop.* lib. i. cap. 13.—“We have in our province a sort of serpent as long as the arm. He is of a glowing red colour, but somewhat brownish; he hides himself under bushes and grass. This animal has an offensive breath; and he breathes out [spurts out, ejects, more properly,] a poison so venemous and stinking, that a man or beast within reach of it, is sure to perish quickly by it, unless immediate assistance be given.”

“At *Mouree*, a great snake being half under a heap of stones, and the other half out, a man cut it in two at the part which was out from among the stones; and as soon as the heap was removed, the reptile, turning, made up to the man, and *spit such venom into his face as quite blinded him*, and so he continued some days, but at last recovered his sight.” *Barbot*, in *Churchill*, Vol. V. p. 213.

This history is remarkable, because the venom of poisonous serpents is usually ejected by a perforation in their cheek-teeth, or fangs; this ejection accompanies the act of biting: and it does not appear that this man was bit. Moreover, whether the matter spurted by this serpent was venom does not appear; nor what effect it had, or might have had, on parts not so tender as the eye. Nevertheless, we learn from this instance, that serpents have a power of throwing out from their mouth a quantity of fluid, of an injurious nature: and
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the casting out of such fluid in a quantity proportionate to the immense size of his Dragon, is what without doubt the writer of the Revelations calls a *stream*, which, happily for the woman at whom it was aimed, was ingulphed by the opening earth. [I rather think this stream was not properly venom; and the writer of the Apocalypse does not say it was; these great serpents not being venomous, strictly speaking.]

Having admitted the real Dragon of Scripture to its proper place, and proved his existence, and his manners, in conformity to Scripture accounts, it may not be amiss to consider, whether he does not pretty closely represent the Hebrew *nahash*; which, perhaps, is sometimes taken *generically* for all the serpent tribes; and sometimes for the largest kind, "the serpent," or dragon, by eminence. Of the first acceptation of the word *nahash*, we have an instance, Jer. viii. 17. where we read of serpents—*nahashim*, which is explained by *tjephonim*, hereby determining what kind of *nahashim* should be selected as most venomous and fatal. The second acceptation of this word is not uncommon; and PARKHURST assimilates it to the *Dragon* of the Greeks.

But we ought to observe the application of this word (*nahash*) to a *sea-serpent*, also; and here we lament want of information. Is there more than one kind of sea-serpent? if so, what are their differences? These questions I have not been so happy as to answer to my own satisfaction; but observe, 1. That most serpents are *amphibious*, and take to the water readily. 2. That the great *Boa* is not checked by wide rivers, or high waves: he may be destroyed by fire, but water he does not fear. Let us combine our evidence on this difficult article.

There seems to be at least one kind of large serpent, which ventures a considerable distance out to sea; this appears to be a land serpent, equally as it is a water-serpent. I have however read of proper water-serpents, seen too far out at sea to be supposed natives of the land: these are true *hydras*; but their varieties, colours, manners, and other particularities, are not, I believe, well understood. The following histories seem rather to belong to *amphibious* serpents:

"Serpents are very common all over the isle of Ceylon: *the SEA-SERPENTS are sometimes eight, nine, or ten, yards long*. The most dangerous serpents are the *Cobras di capellas*. The Malabars call the serpents *pambo* and *naga*, and give their cattle and children their names; nay, they feed them because they should do them no harm." *Baldeus*, in *Churchill*, Vol. III. p. 731.

"*Peter van Coerden* admiral of the Dutch fleet in the East Indies, says, that while he was at anchor on the coast of *Mozambic*, a boy that was washing himself by the ship's side was seized by the middle by a serpent of enormous size, that dragged him under water at once in the sight of the whole fleet." *Harris*, *Voyages*, Vol. II. p. 475.

"*P. van den Broek* says, that at *Golconda* there are serpents of prodigious size, the bite of which is instantly mortal; and observes farther, that *whenever these creatures are seen at sea*, it is a certain sign of their being near the Indian coast."

"Admiral *Verhoven* tells us a singular story of a sea-serpent in the straits of *Sincapoua*. A seaman washing himself by the ship's side, was seized by one of

of these creatures; on which he roared so loud, that one of his companions threw him a rope, and pulled him into the ship: but the serpent had torn such a piece out of his side, that he died immediately. The serpent continued about the ship, till at last it was taken, *and was the largest they had ever seen.* On opening its belly, they found therein the piece of flesh which he had torn from the sailor, and which they buried with him." *Harris, Ib. Adm. Verhoven's Voyage*, p. 92.

We cannot doubt the existence of true sea-serpents at least equal in dimensions with land serpents: (Vide *Literary Panorama*, Vol. V. p. 749. for one 55 feet long,) but do these possess venom? However that may be, the histories quoted may justify the sacred writers in speaking of sea-serpents, which they call *nahash*: as Amos ix. 3. "Though they hide in the bottom of the sea, thence will I command the serpent—*nahash*, and he shall bite them." Vide EXPOSITORY INDEX in Amos ix. 3.

The reader will connect with this the recollection of a *nahash* ascribed to the heavens; so Job asserts, xxvi. 13. "By his spirit he hath garnished the heavens; his hand hath formed the *crooked serpent*." This *crooked serpent*, whatever constellation were so named, is clearly referred to the heavens; and whether it were as some have supposed, a constellation around the north pole, or, as others think, the milky way, whose tortuous course not unaptly represents the convolutions of a serpent's form, cannot be fully discussed in this place.

But it may be hinted, by way of caution, that since it was a *nahash* which tempted Eve, not a *peten*, or a *tjephon*, it is of consequence to trace the application of this word accurately; lest, peradventure, that action be attributed to a serpent of a kind totally different, from what was designed by the sacred writer; which error would infallibly occasion others, perhaps not equally innoxious.

I take the present opportunity of suggesting a thought or two, on the existence of *flying serpents*: as Scripture is usually understood to mention them.

MICHAELIS says, (*Quest. lxxxiii.*) "Although modern naturalists have not communicated any satisfactory information respecting *flying serpents*, yet they are so often spoken of by the ancient writers of nations near to the equator, who may be better acquainted with the nature of serpents than we are, that I dare boldly recommend further inquiries to travellers, respecting the existence of flying serpents. If there be any, and if they have been seen by witnesses deserving of credit, I beg every information, name, &c." This inquiry is interesting; and though we are unable to affirm, that serpents, flying by means of wings, inhabit those countries to which Scripture more particularly refers, yet if they exist *now* in any country, it will be so much in proof of the possibility of their former existence in other countries.

Barbot, after mentioning serpents on the Coast of Guinea thirty feet long, as the blacks assured him, says, "They also told me, there are *winged serpents* or *dragons*, having a forked tail, and a prodigious wide mouth, full of sharp teeth; extremely mischievous to mankind, more particularly to small children. If we may credit this account of the blacks, these are of the same sort of winged serpents, which some authors assure us, are to be found in *Abyssinia*, being
very

very great enemies to the elephants. *Barbot*, in *Churchill*, Vol. V. p. 213.

In the woods of Java are certain flying snakes, or rather drakes, [*dracos*] they have four legs, a long tail, and their skin speckled with many spots; their wings are not unlike those of a bat, which they move in flying, but otherwise keep them almost unperceived close to the body. They fly nimbly, but cannot hold it long, so that they fly from tree to tree, at about twenty or thirty paces distance. On the outside of the throat are two bladders, which being extended when they fly, serve them instead of a sail. They feed on flies and other insects. The *Javanese*s do not in the least account them poisonous, but handle them just like common snakes, without the least danger," *Nieuhoff* in *Churchill*, Vol. II. p. 296. [These are flying *lizards*, not *serpents*.]

NIEBUHR says, "There are at *Bazra* a sort of serpents called *heie sursurie*, or *heie thiâre*. They commonly keep on the date-trees; and as it would be troublesome to them to come down a high tree, and creep up another, they hang by the tail to a branch of one tree, and by swinging that about, take advantage of its motion to leap to a second. These the modern Arabs call *flying serpents*, *heie thiâre*. I do not know whether the ancient Arabs saw any other kind of flying serpent. Some Europeans from *Bombay* assured me, that they had seen serpents with two heads; and others with two feet." [which is certainly true.] Then he alludes to *Anson's Voyage* for further proof.

The words in *Anson's Voyage* are, "The *Spaniards* too, informed us, that there was often found in the woods a most mischievous serpent, called the *flying snake*; which, they said, darted itself from the boughs of trees, on either man or beast that came within its reach, and whose sting they believed to be inevitable death." P. 308, 8vo. The reader will observe, this is report.

To conclude by returning to the *Dragon*—

The following is the latest, and most distinct, account which I have been able to procure, of one of these large serpents: I hope no apology is necessary for alluding to an inhabitant of South America (I have been extremely jealous of such *excursions*.)—It combines several particulars which coincide with our purpose—though it differs certainly from the *red dragon* of Asia or Africa.

"We had not gone above twenty yards through mud and water, the negro looking every way with an uncommon degree of vivacity and attention; when starting behind me, he called out, "Me see snakee!" and in effect there lay the animal, rolled up under the fallen leaves and rubbish of the trees; and so well covered, that it was some time before I distinctly perceived the head of this monster, distant from me not above sixteen feet, moving its forked tongue, while its eyes, from their uncommon brightness, appeared to emit sparks of fire. I now, resting my piece upon a branch, for the purpose of taking a surer aim, fired; but missing the head, the ball went through the body, when the animal struck round, and with such astonishing force as to cut away all the underwood around him with the facility of a scythe mowing grass; and by flouncing his tail, caused the mud and dirt to fly over our heads to a considerable distance. Of this proceeding however we were not torpid spectators, but took to our heels, and crouded into the canoe.... I now found the snake a little removed from his former

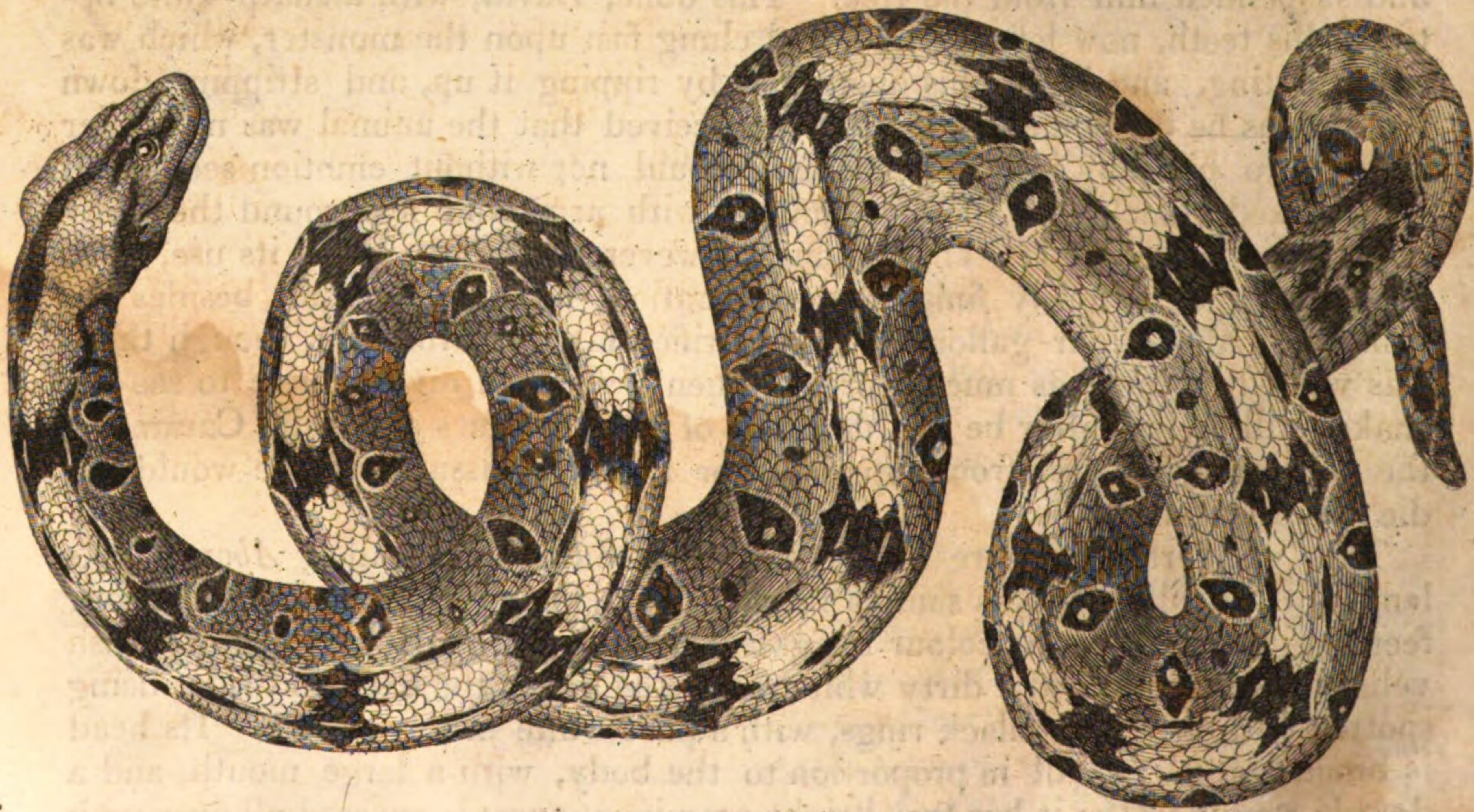
former station, but very quiet, with his head as before, lying out among the fallen leaves, rotten bark, and old moss. I fired at it immediately, but with no better success than the other time: and now, being but slightly wounded, he sent up such a cloud of dust and dirt, as I never saw but in a whirlwind, and made us once more suddenly retreat. . . . Having once more discovered the snake, we discharged both our pieces at once, and with this good effect, that he was now by one of us shot through the head. David, who was made completely happy by this successful conclusion, ran leaping with joy, and lost no time in bringing the boat-rope, in order to drag him down to the canoe; but this again proved not a very easy undertaking, since the creature, notwithstanding its being mortally wounded, still continued to wreath and twist about, in such a manner as rendered it dangerous for any person to approach him. The negro, however, having made a running noose on the rope, after some fruitless attempts to make an approach, threw it over his head with much dexterity; and now, all taking hold of the rope, we dragged him to the beach, and tied him to the stern of the canoe, to take him in tow. Being still alive, he kept swimming like an eel; and I having no relish for such a ship-mate on board, whose length (notwithstanding to my astonishment, all the negroes declared it to be but a young one come to about its half growth) I found upon measuring it to be twenty-two feet and some inches; and its thickness about that of my black boy Quaco, who might then be about twelve years old, and round whose waist I since measured the creature's skin. . . .

The negro David having climbed up a tree with the end of the rope, let it down over a strong forked bough, and the other negroes hoisted up the snake, and suspended him from the tree. This done, David, with a sharp knife between his teeth, now left the tree, and clung fast upon the monster, which was still twisting, and began his operations by ripping it up, and stripping down the skin as he descended. Though I perceived that the animal was no longer able to do him any injury, I confess I could not without emotion see a man stark naked, black and bloody, clinging with arms and legs round the slimy and yet living monster. This labour, however, was not without its use, since he not only dexterously finished the operation, but provided me, besides the skin, with above four gallons of fine clarified fat, or rather oil, though there was wasted perhaps as much more. When I signified my surprize to see the snake still living, after he was deprived of his intestines and skin, Caramaco, the old negro, whether from experience or tradition, assured me he would not die till after sun-set.

This wonderful creature in the colony of Surinam is called *Aboma*. Its length when full grown, is said to be sometimes forty feet, and more than four feet in circumference; its colour is a greenish black on the back; a fine brownish yellow on the sides, and a dirty white under the belly; the back and sides being spotted with irregular black rings, with a pure white in the middle. Its head is broad and flat, small in proportion to the body, with a large mouth, and a double row of teeth: it has two bright prominent eyes: is covered all over with scales, some about the size of a shilling; and under the body, near the tail, armed with two strong claws like cock-spurs, to help it in seizing its prey, It
is

is an amphibious animal, that is, it delights in low and marshy places, where it lies coiled up like a rope, and concealed under moss, rotten timber, and dried leaves, to seize its prey by surprize, which from its immense bulk it is not active enough to pursue. When hungry, it will devour any animal that comes within its reach, and is indifferent whether it is a sloth, a wild boar, a stag, or even a tiger; round which having twisted itself by the help of its claws, so that the creature cannot escape, it breaks, by its irresistible force, every bone in the animal's body, which it then covers over with a kind of slime or slaver from its mouth, to make it slide; and at last gradually sucks it in, till it disappears: after this, the *Aboma* cannot shift its situation, on account of the great knob or knot which the swallowed prey occasions in that part of the body where it rests till it is digested; for till then it would hinder the snake from sliding along the ground. During that time the *Aboma* wants no other subsistence. I have been told of negroes being devoured by this animal, and am disposed to credit the account; for should they chance to come within its reach when hungry, it would as certainly seize them as any other animal. The bite of this snake is said not to be venomous; nor do I believe it bites at all from any other impulse than hunger." STEDMAN'S *Expedition to Surinam*, Vol. I. p. 170.

Our plate represents the GREAT RED BOA of Africa.







ANCIENT CENSERS.

OF ANCIENT CENSERS, &c.

IT appears from numerous instances, that the services of divine worship, under the Mosaic dispensation, resembled those usually addressed to monarchs and sovereigns among oriental nations; and there can be little doubt, that the Hebrews directed them to a person *understood* to be resident in the sanctuary, where they were performed. This notion of the Jewish services was so strong among the heathen, that we find they reported the object of worship in the Temple at Jerusalem to be an *old man with a long beard*. That report might possibly originate in the description of the *Ancient of Days* by the prophet Daniel. However that might be, it is generally concluded that the attendants on the Temple were pretty nearly the same as the attendants on royalty and dignity in general; and many of the external acts of worship were of the same appearance and import, as those addressed to kings and grandees in the East.

We have no custom among us of burning perfumes, as a mode of doing honour; and though the Church of Rome has adopted the use of the censer, and fumigation, yet it remains as a part of *sacred* worship, not of *civil* gratulation. On the contrary, in the East, fumigation forms a part of *civil* entertainment; and is never omitted when a guest is intended to be complimented. Being thus general, and indeed indispensable, in Asiatic manners, it was received anciently into divine worship; and the priests in their ordinary service, as well as the high-priest, in the most solemn acts of his public ministration, used incense—a cloud of incense, in approaching to God.

Little is known on the form and nature of the ancient Hebrew censer. What censers have been received from heathen antiquity, and those used in the Romish worship also, being suspended by chains, they give, on some occasions at least, false ideas of this sacred utensil, as employed among the Jews.

The original employs two words, both rendered *censer* in our translation. The first, (מחאתה *mechateh*, or, מחאתת *mechatet*), is used in describing the censers of Aaron, and of Korah and his company, Lev. x. 1. Numb. xvi. 6. It appears, that these were of brass [or copper], and that after the death of those who had presumptuously used them, they were beaten into *broad* plates for a covering to the altar. From this application of them, we infer that they were not *cast*, nor of *great thickness*, nor made of small pieces: but they were thin, and their plates were of considerable surface. This term continued to denote a censer under the monarchy; for we read, 1 Kings, vii. 50. and 2 Chron. iv. 22. of *censers* (מחאתות *mechatut*) of gold, made by Solomon.

Nevertheless,

REVELATION, CHAP. XV, VER. 7, 8.

Nevertheless, we learn from 2. Chron. xxvi. 19. that Uzziah the king attempted to burn incense in the house of the Lord, having a *censer* in his hand. The word is different from the former (מקטרת *meketharet*), and seems to import an implement of a different form. This kind of censer was probably of a *civil*, if not a profane (*possibly*, of an idolatrous) nature: for we read, Ezek. viii. 11. that the seventy persons engaged in idolatrous worship had every man his censer, *mekatheret*, in his hand. The same may be inferred from 2 Chron. xxx. 14. where it is recorded, that Hezekiah and his people took away the idolatrous altars that were in Jerusalem; and all the altars for incense—*meketherut*. However, it must not hastily be concluded that this article was *wholly* idolatrous; for we read, Exod. xxx. 1. “Thou shalt make an altar (מקטרת קטרת *mekethar ketheret*, to fume with perfume), *i. e.* to burn incense thereon:” so that this kind also was employed in Divine worship. It deserves notice, that those who used these *meketherut*, are described as holding them *in their hands*: so Uzziah had *in his hand*—and the seventy men in Ezekiel had each *in his hand*—his *meketherut*: but this position is not, that I recollect, ascribed to the *mechatet*, or censer of Aaron.

On the whole, I think the *mekatheret* may be considered as a kind of censer, carried in the hand; not singly, as the heat arising from the burning embers it contained would be disagreeably great; but in a kind of dish, which dish [with the censer in it] was placed on the altar of incense, and there left, making a smoke, morning and evening, during the trimming of the lamps, &c. Exod. xxx. 7, 8. Apparently, this may be taken as an inferior kind of censer, appropriate to the priests, and common to them all: but whether the other kind, the *mechatet*, was peculiar to the high-priest, is not clearly ascertained: it is mentioned as being used by the sons of Aaron, Lev. x. 1.; but that was an irregularity, and was punished as such; it is mentioned also as being employed by two hundred and fifty of the associates of Korah; but that was in rebellion, and proved fatal in the event.

Somewhat of a similar distinction of censers is observed in the New Testament; for the twenty-four elders (Rev. v. 8) had golden *vials* full of odours (φιάλας);—but, chap. viii. 2. the angel had a golden *censer* (λίβανωτον). These *vials* were not small bottles, such as we call *vials*; which idea rises instantly by association in our minds; but of the nature of the censers and dishes, in our plate (compared by Dr. DODDRIDGE to a tea-cup and saucer); and this gives a very different idea to chap. xv. 8. xvi. 1. &c. of the same book; where the vials, having the wrath of God, are *poured out*; for if they contained *fire*, that is a fit emblem of wrath; and its embers may be said to be *poured out* from a censer with great propriety. This will be very apparent, if we suppose, for instance, the covering of the censer No. 2. on our plate to be wholly removed; in which state the bowl of it, perhaps, may be that described by the Apocalyptic writer—as a *vial*, and it might conveniently contain the fire to be *poured out* from it. This is perfectly agreeable to its form and services as a censer, and to the nature and use of ancient *meketherut*. We

We ought also to remark, that carrying these censers is an office of servants, in attendance on their superiors;—the same office anciently, in the Temple, no doubt, denoted waiting on the deity;—being employed in his service;—in attendance on him. This action, therefore, demonstrates the *devotedness* to false gods, of those who worshipped them, by bearing censers to honour their images: especially when it is recollected, that offering incense was connected with addresses and prayers; as appears from Numb. xvi. 47. Psalm cxli. 2. Isaiah lx. 6. Jer. xi. 12. Matt. i. 11. Luke i. 10. Rev. v. 8.

Our plate shews the fashion of censers in the East.

No. 1. Is from Pocock. It consists of a censer, properly speaking, with its dish, in which it stands. This dish is certainly, a preservative to the hand of the bearer from the effects of the fire enclosed in the censer itself.

No. 2. Is a censer used in Arabia, from Niebuhr; who says, “This censer is of wood, and its covering is of plaited cane; its form as shewn in the print;” but he also remarks, “The sprinkling vase and the censer are sometimes of silver, and very neatly worked” with ornaments. One should suppose, indeed, that metal would always be employed in censers, which were designed to furnish fumigation during any length of time: however wooden censers and plaited cane coverings might be employed on occasions which required only the services of a few minutes; and the action of a very moderate degree of heat.

No. 3. Is from De la Motraye, and exhibits a censer with its dish. The distance of this censer from its dish, from which it is separated by the intervening legs, effectually prevents the heat of the fire in the censer, from scorching the bearer of the implement.

No. 4. Is from a print representing the reception of a French ambassador (drawn at large from the same figure as No. 7.) by the Grand Vizir; from a picture in the collection of the late Lord Baltimore. This also is a censer and a broad dish; so that, in these instances, how different soever be the form of the censer, we observe that a dish, though differing in shape, is its regular accompaniment. It is evident, that to a censer, full of burning coals, intended to be left on a wooden altar, such a broad pan was necessary for safety; and to diminish its hazard. The censer from Niebuhr is distinguished, by having no dish, equally as by its being of cane, instead of silver. Observe also, that these are carried in the hands of the attendants. These circumstances taken in connection support the conjecture, that these censers resemble the *mekatherut* of Uzziah, and of the seventy idol-worshippers in Ezekiel.

No. 5. Is the vase, or bottle, containing perfumed water, which is to be sprinkled on the guests, by way of salutation; as customary at the close of an eastern visit. To this ceremony we have supposed an allusion in Isaiah, ii. 13. *Vide* Fragment, xiv. p. 30. “When a stranger rises to depart, the master gives a sign to his servants to bring the rose-water and perfume.

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The rose-water is sprinkled on the departing guest, and the perfumed smook is directed to his beard, his large sleeves, and whatever other part of his dress may retain it. The beard will retain it for a long time. This fumigation is among the greatest marks of honour and personal compliment in the East.

No. 6. Is the figure of a female servant, in DE LA MOTRAYE's print of a Turkish *haram*: she is bringing in the sprinkling bottle of perfumed water, and the censer, containing burning perfume. This censer is the same as No. 3.

No. 7. Is the figure of a Turkish servant, in the picture of the reception of the ambassador, already mentioned. His office is to bear the censer; and he waits for orders to employ it on the person to be honoured. This censer is the same as No. 4. These figures shew the mode of carrying this kind of censer—either in the hands; or—on the arms.

No. 8. Is an ancient censer; from Montfaucon, vol. ii. p. 140. It is the only one he knew of. It is of heathen, and probably of Roman, origin.

No. 9. Is a box in which incense was kept: from the same volume, and author, and coming under the same remark.

We read in Leviticus of various utensils adapted to the service of the Temple, such as *pans*, snuffers, &c. As the forms of these Instruments are not come down to us, nothing can be affirmed concerning them beyond their probable and necessary application. But, we may be permitted to hint, that could the forms and construction of those, and of other sacred utensils, be recovered, there is every reason to believe that their propriety, elegance, and even dignity, of form and materials, would be such as might both interest and gratify the taste of the most distinguished *amateur*. We have no reason to conclude that any *frivolous* or unnecessary commands were given originally, or were left on record for the direction of after-ages. The idea alone that the instruments ordered were of the best kind, and such as were employed in the service of sovereigns and princes, justifies the sacred writer in preserving the particulars of their description; since it amounts to a prohibition of the inferior kinds, which otherwise some inconsiderate or indifferent worshippers might have substituted: and it is at least a perpetual memorial, that even in minor matters we ought to make it a point of honour and conscience to serve God with our best.

AN ATTEMPT TO ARRANGE

IN A SYSTEMATIC ORDER,

THE

NATURAL HISTORY

OF THE

Sacred Scriptures.

INTRODUCTION.

SCIENCES are so much allied to each other, by that disposition of mind which they require, if not by that track of study which those who cultivate them are under the necessity of treading, that scarcely any person has excelled in one only, and without possessing, at least, a moderate acquaintance with others. It is true, Divinity has been considered as a science by itself, and independent of all others: but, those who have thus thought, have rarely given proofs of extensive knowledge, or superior progress, in this study, considered as a science. Far be it from us to deny, that Religion alone, may have powerful effects on the heart, may controul the life, and form the character, with most sovereign influence; yet this, though an effect the most important, the most valuable, is not properly what constitutes a science. He may practice the precepts of his religion, who nevertheless, cannot give a competent answer to those who enquire into its authority: he may hardly be capable of pointing out in what quarter of the world it originated, where its first professors resided, or by what means it was propagated: he may never have read the history of those who yielded their lives in attestation of the truth; he may be unacquainted with transactions, which though connected with the sacred Scriptures, are not narrated in them—yet he may be a good man. Is it then this ignorance makes him good? or would he cease from being good were he so well informed, as to be able to silence gainsayers, and to prove by accumulated authorities, those facts which are the foundation of his faith? Would he cease to be good if he studied the Sacred Oracles in their connection, their relation to other events, to other histories; and if,

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when considering their nature and injunctions, he could shew the correspondence of parts to parts, with the accurate meaning, inference, and connection of the whole; even in passages where the uninformed mind discovers neither meaning nor connection? Perpetual ignorance is perpetual childhood: is it consistent with the repeated exhortations of Scripture, to "go on to perfection," to "aim at a state of maturity," to "increase in wisdom," to "add knowledge to faith," and to have "our senses exercised, for the purpose of distinguishing between good and evil:"—is it consistent with these, and a variety of similar exhortations, that we should continue ignorant of the real meaning of passages of Scripture, not obscure in themselves, but which our own negligence suffers to remain enveloped in uneasy uncertainty? I say *our own negligence*, because these passages were clear, and well understood among those by whom they were heard, or to whom they were addressed. And this remark may safely be applied to articles of Natural Science: these were constantly under the notice of those who were instructed by reference to them; any day, any hour, could they examine "whether these things were so:"—but this is not the case with us; not enjoying this advantage, we ought to exert peculiar diligence to diminish the effect of such privation, and to disperse, if possible, those ambiguities which must needs surround us, in our perusal of Holy Writ. Much information communicated in Scripture is derived from natural objects, or natural objects are employed to denote, what perhaps has no immediate reference to corporeal nature, but rather to spirit, and spiritual instruction. This is obvious, and frequent. If we take *literally* the poetical compositions of Scripture, we find it impossible to justify their veracity: if we take strictly, what is intended figuratively, among the preceptive maxims of Scripture, we do despite to that Holy Spirit of grace, by which those maxims were recorded for general instruction: if we err in interpreting passages which speak of natural things, what security have we against error in passages which treat of spiritual things? If we substitute, through ignorance, or inattention, a beast for a bird, a man for a horse, a lion for a serpent, who will insure us from more dangerous substitutions, through equal ignorance, or equal inattention, in what relates to the exercise of faith, hope, charity, zeal, righteousness, or godliness. If we are asked, "where is the remedy for these inaccuracies?" the answer is ready: let those, who having paid attention to ANY branch of these studies, have reason to think they have acquired some knowledge in them; let such communicate their knowledge. If studies of this nature be not strictly and properly Divinity, they are such as Divinity, in our time and day, cannot do without. The age boasts of being enlightened; and, in some respects, it may justly be esteemed so: is not knowledge, to a certain degree, general among us? is not the public at large well informed? What a sad reflection then, is it, that, while on most things we are making every effort to carry knowledge to its summit, to perfection, we should think little of endeavours to illustrate Holy Scripture in ANY of its departments! and why?—with what does our sacred volume open? with a history comprising Astronomy, Geo-
logy,

logy, Botany, Natural History, and Philosophy:—can these be understood by those who have studied mere Divinity only; will not that person who has no conception of the principles of these things, be liable to mistake, when considering them?—not to insist on that fund of sacred pleasure which we possess, who has acquired a competent acquaintance with them, who sees the veracity of Scripture representations, and can prove them to be veracities, by appealing to principles established in Nature itself. Do the Scriptures instruct us that the sun originally ruled the day, and the moon the night? so they do still; were they the *greater* luminaries anciently? so they are now: did the moon, in her course, regulate the seasons in her early days? the same we find in the present day. We say the same of creatures: “did the turtle, the crane, and the swallow, know their appointed times,” when Jeremiah wrote? we are certain they retain this knowledge: but how do we acquire this certainty? not from birds in our own land; cranes and turtles are not resident among us; we must enquire on the spot, must make our observations, where these birds are common, and must justify Scripture, by appealing to the actual and the annual occurrences in countries where Scripture was given. Only imagine for a moment, that the fact were not so; or that we could not prove the fact to be so;—what a triumph for infidelity were that!—what! the Holy Book false! in an article too, on which the merest peasant could not have erred!—Be it remembered, then, that in proportion as that would be vexatious is the gratification of finding, that in this instance, as in all others, Scripture need fear no examination: truth, unerring truth is its origin; and will continue to be its character: and this the more freely it is examined, the more decidedly it will maintain. But Scripture, for the most part, is not the work of mere peasants; it is the production of *literati*, of men, eminent by station and talents. We are told that “Moses was learned in all the wisdom of the Egyptians;” and we believe the history: his works prove it. His remarks on natural things are not remarks at random: they are not inconsistent with each other, or with fact; they are not the disorderly effects of ignorance, but the regular production of a mind familiar with systematic arrangement. And moreover, the system of Moses sustained its reputation, and was adopted by Solomon himself, after no inconsiderable lapse of ages. Those who think that Deity being the fountain of knowledge, all knowledge is *communicated* to man, will certainly not object to the system of Moses, which their own principles trace to the highest source; they will see with pleasure the order of its arrangement, and the regularity of its parts; they will acknowledge its beauties, and certainly will applaud those efforts which attempt to illustrate its principles. But other important consequences follow the admission of this cultivated and regulated knowledge as being extant in early ages;—those who lived at that period, had the same means of attaining information as we ourselves have. It seems of little moment at first sight, whether we allow or deny plans or maps to be as early as the days of Joshua; but if this be established, then we can account for the remarkably distinct descriptions of the portions allotted to each of

the tribes, by the legislator Moses, who never saw those allotments [which has been urged by infidels as an insuperable difficulty.] If delineations of these countries were composed into a book, then writing was not inscribed on stones only [as Voltaire has rashly insisted:] and if writing were, as it appears undeniably to have been, in popular use, then, many of those communications between party and party, in early ages, which have occasioned embarrassment to commentators are entirely deprived of their difficulties. Nor is this all; for, if the existence of writing be admitted, by the same admission the necessity for tradition is removed, the clearness of information is established, and the faithful transmission of those events which it recorded is ensured—even to perpetuity. This, too, has its effect in considering the origin of Scripture, and carries that origin up to a period, much earlier than has been suspected. That the Scriptures were extant in the time of Ezra, and that he was their editor, not their author, is admitted by all well informed persons; but they have not ventured to consider Moses in the same character, as combining, and arranging, for the use of his people, now for the first time forming a nation, those documents which their forefathers had transmitted down to them in their families and tribes. We know that it would contribute to our better understanding of various parts of Holy Writ, if we could clearly ascertain their authors. Some divisions of the Mosaic books seem to have been written not in the West but in the East; this has been thought a formidable proposition; and the admission of the principle has been dreaded by orthodox divines, and orthodox believers. But wherefore?—If these portions were written by Abraham, instead of Moses, where would be the harm? what inferiority of character would attend them? in truth none: they would still demand the same confidence, as if every letter had been composed by his eminent descendant. And beside, Abraham might compose them in the East, where he could obtain the best information, and might converse with those who had participated in the very transactions which he wished to communicate to his family, for the instruction of progressive posterity.

But what restricts us from including in our ideas yet earlier sources? why could not those persons who favoured Abraham with information, favour him with *written* documents? or rather, since his great ancestor Shem, who, as well as Abraham, removed from *Kedem* to Syria, was the priest of all mankind, and the very person to preserve knowledge, no less by office, than by habit and disposition, what forbids our believing that Shem furnished Abraham with such writings as he knew to be authentic, whether of his own composition, or composed by any other patriarch? This enquiry belongs to history: but it may safely be assumed as a fact: and it belongs also to our present purpose, so far as to shew the propriety of considering, whether the names of beasts, and birds, and plants, which we have been in the habit of attributing to Egypt or Syria only,—which, I say, we have never thought of looking farther East for, should not, in truth, be sought in those countries which Abraham and Shem originally quitted.

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We have every reason to infer, that the distinction between clean and unclean beasts, for instance, was extant when Abraham dwelt in *Kedem*; that he observed it there, that he brought it from thence, and transmitted it as an ordinance which he had received in his earliest youth. If then, we wish to decide accurately, on the species of these beasts, is it unnatural, or irrational, to suspend our attention to animals native in Egypt or Syria, and to enquire what creatures are known in *Kedem*? If we find the *bdellium* of a passage supposably written in *Kedem*, is hardly to be explained by any production of Arabia, or Palestine, where is the impropriety of enquiring whether it may not be a well-known article in *Kedem*? "This principle requires great exertions of enquiry; great investigation, much information, &c. &c.:" no doubt it does; but, if the Scriptures be the word of God, they are worth the trouble of explaining: if they really are of that importance which we professedly attach to them, why such languor in our endeavours after their true import?—why is ANY department of their contents overlooked?—why is the Bible the most neglected book of all in our language, to which we confessedly attribute some value? But is it said "of what consequence is it, whether the Natural Knowledge of Scripture be correct? cannot matters of faith be received apart from matters of philosophy?" Not so easily as the triumphant air with which this question is often asked, supposes:—For, what have been the remonstrances of hesitating minds on this subject? It is vain to repel this remark, by saying, the "*cavils* of infidelity ought not to be heard;" it is granted the *cavils* ought not; but does this answer the fair and rational observations of an upright but doubting mind? Nay, we cannot think infidels themselves to be void of common sense, because they are, unhappily, void of pious faith: they have the mental abilities of mankind, in common with others; and when these abilities are exercised in just and honourable enquiries, upon just and honourable principles, and on just and honourable subjects, such as a sincere enquiry after truth undoubtedly is; woe be to that professor! whose Christian charity suffers him to describe such enquiries under the term *cavils*, or under any other degrading term whatever.

Is it not much wiser to endeavour to illustrate Scripture in EVERY branch? to show, that as it is the first book in the world, in respect of piety, so it is in respect of science; that, as it derives its GREAT principles from Deity itself, so its MINOR principles are not unworthy of the same sacred source; and moreover, that the embarrassed mind, which does not assume to judge of the GREAT principles, may yet, by investigating the MINOR principles, and perceiving their accuracy, their extent, their application, their consistency with the course of nature, and their general veracity, be induced to *feel* the veracity of the leading and principal subjects. Is Scripture injured by appearing, demonstratively, as the work of men of learning, rather than of ignorant persons? the labours of *literati*, rather than of mechanics? the authentic records of kings, rather than the casual collections of individuals? Can we value too highly the opinions of those, who (in whatever period of time they lived) passed their lives in learned investigation, who had access to the very best sources of information,
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and who combined the intelligence they received, with the happiest application of talents, and the consummate wisdom of art and genius? We think highly of LINNÆUS, we think highly of ARISTOTLE—and why? because their learning entitled them to a distinguished situation among those who have studied Nature, and Natural Science; this is proper: but the intent of the present endeavour is, to shew, at least, equal propriety, perhaps much greater, in placing the Naturalists of Scripture, before ARISTOTLE and LINNÆUS. This will startle some readers: “what! has not LINNÆUS reduced to the best of systems, the disorderly suppositions of others? did not ARISTOTLE first perceive the necessity of that *order* which so greatly facilitates the study of Nature?”—These questions may safely be answered in the negative: SOLOMON before ARISTOTLE, wrote *in order*, on natural subjects: but SOLOMON was not the inventor of that order, he did not even reduce it to system, for it had been rendered systematical long before him. He followed the system of MOSES. Was MOSES, then, the author of this system? that is more than we can say. It is found in the works attributed to him; but as he, of course, used such documents as his library furnished, it is every way possible, that it dates from a period prior to MOSES. This enquiry is interesting, and our design is to endeavour, at least, to throw some light on it, if we cannot illustrate it in all its parts.

What was the system of SOLOMON, we learn from 1 Kings, iv. 33. where we read, *that he (spake, or wrote, i. e.)* described the subjects of Natural History, placing first, BOTANY (with delineations?) which he divided into *two* parts; one relating to trees, great trees, such as the cedar, which begun his work; the other to lesser vegetables, which are *generically* called *hyssop*, meaning, the very stone-crop on the wall, perhaps, or even the mosses; then he introduced NATURAL HISTORY, but in a separate book of his work. *He spake ALSO of Great Beasts, Birds, Reptiles, and Fishes.* These are the heads of the chapters into which his work was divided. His arrangement was systematical, and would stand thus:

I. BOTANY.

1. TREES. 2. PLANTS.

II. NATURAL HISTORY.

1. BEASTS. 2. BIRDS. 3. REPTILES. 4. FISHES.

When we compare this with the arrangement of MOSES, Deut. iv. 16. &c. we find it precisely the same; only, MOSES being there engaged in prohibiting idolatry, says nothing about plants, or trees, which he was not much afraid should be worshipped, if other idolatry were unknown. His system would stand thus——

1. MAN. 2. BEASTS. 3. BIRDS. 4. REPTILES. 5. FISHES.

But

But the most determinate instance of system, is the Mosaic account of the Creation, in the first chapter of Genesis; which, on consideration, will be found to resolve itself into

GEOLOGY.

- I. Earth at rest, produces nothing; without form, and void, dark.
- II. Earth revolving, produces,
 1. Wind.
 2. Light: making, 1. Day. 2. Night.
 3. A Firmament: making a *serenification* of the atmosphere.
 4. Sea.
 5. Land.

Observe, hitherto the productions have been in pairs, or **DUALS**: 1. Light: 2. Darkness—*i. e.* 1. Day: 2. Night.—1. Waters above the firmament: 2. Waters under the firmament: *i. e.* 1. The lighter atmosphere: 2. The heavier atmosphere.—1. Sea: 2. Earth.—whereas in the following subjects they are **TRIADS**; the former actions merely implying their counterparts, as resulting from any one action;—but the ensuing narration implying arrangement:

I. BOTANY. *Verses 11, 12.*

1. GRASS. 2. SHRUBS. 3. TREES.

II. AQUATICS. *Verses 20, 21.*

1. INSECTS. 2. AMPHIBIA, 3. BIRDS.

III. TERRESTRIALS. *Verses 24, 25.*

1. WILD VERMIN. 2. LARGE BEASTS. 3. SAVAGE ROAMERS.

MAN. *Verse 26.*

Three primary divisions, each subdivided into three secondary divisions.

Can clearer proofs of system be produced from any writer whatever? Here is a uniform progress from a lesser to a larger: from *grass*, including the minutest species of whatever is *green*, to **SHRUBS**, which are apparently taken for **TREES** of the smaller kinds: from these to **TREES**, which not only differ by their enlarged dimensions, but by their permanency. From vegetable life, we advance to animal life, and arrange in the first class, those creatures which are mostly found on vegetables, and seem to be nearest allied to them, insects. But insects are also placed here, because vegetables would grow, and were growing

ing, in earth, on which the effect of the waters yet remained: I mean soft earth, earth hardly drained of its water—these waters then furnished the insects; so they do to this day: we know there are myriads of kinds of insects in the sea, which we cannot enumerate: we cannot walk along the shores of a river when the tide is receding, without noticing millions of insects: and of those which seemingly appertain to the land, how great a proportion does really undergo repeated transformation in water? every pond, every ditch, every streamlet; witnesses this. With great propriety, then, are insects said to have been produced from the waters; which they still are, by an incalculable majority. Wherever the heat of the sun is felt in water, there swarm insects. From *insects*, of which many quit the waters, and rise into the air, we proceed to *Amphibia*, which sometimes quit the waters for the land. *Insects* are so numerous, and so diversified, that I do not know, whether any classification of them is attempted in Scripture: but the *Amphibia* may be divided into, (still preserving the TRIAD,)

1. THE SEAL KINDS. 2. LIZARDS. 3 SERPENTS;
and this, without injuring the character of true FISH, which are only divided into
1. CLEAN. 2. UNCLEAN.

From *Amphibia* we proceed to *Birds*: and here we must recall to the reader's recollection, that vast majority of birds, which live on the sea, which dive into the sea like fishes, and which never forsake this element; every uninhabited island, every rock, every river, affords these. *Birds*, therefore might take a triple division into, 1. water-birds; 2. marsh-birds; 3. land-birds: but the sacred writer himself has divided them (and this division we shall retain) into,

1. LAND-BIRDS. 2. AIR-BIRDS. 3. WATER-BIRDS.

Birds, are a greater approach toward dry-land animals than *Amphibia* are; being also *wild* by nature, they properly introduce *wild Quadrupeds*, those vermin which infest the field, and which range around the habitation of man; those which do him mischief by their numbers, though not by their strength: such is the first class of animals. The second is *Cattle*; the *horse*, the *beeve*, &c.; the third comprises those which ROAM the savage desert, or are rendered terrible by their ferocious ravages; the *lion*, the *tyger*, and other formidable creatures rank among this class—this dreadful class of animals. Yet over this class, in common with others, dreadful as they are, is placed a creature, to govern and controul them: MAN appears the last in this arrangement of Natural History; an arrangement, which, in opposition to modern systems, uniformly rises from the *minor* to the *major*; whereas, our later arrangements, begin with man, and descend to beasts,—birds,—insects,—vegetables, &c. Nevertheless, the order is the same, though the course of that order be inverse; and, that the

order of creation, was, in propriety, perhaps in necessity, (as the Deity appointed that necessity) according to the ancient system, we have, by a few simple principles, demonstrated in its place.

We may, however, note in SOLOMON a deviation similar to those of modern naturalists, since that prince placed great *trees* (the *cedar*, &c.) before *plants*; and MOSES himself, on another occasion, places *man* before *beasts*, and birds, &c.: and this, I doubt not, was the received arrangement, which Moses, as a naturalist, adopted: whereas, when writing a history of events, he was bound by the course of events; and he could not adhere to system at the expence of truth. In this, too, let him stand as an example to naturalists of later times.

I presume to think it very likely, that this order of minor to major, was strictly maintained in the works of the Jewish naturalist; and I heartily wish it was in our power to maintain it correctly, in the following arrangement: but, who can boast of sufficient acquaintance with the subjects of it, whether plants or animals, to be certain of determining their *species*, much less their rank and station?—A mere sketch, an outline of the Mosaic system, is all the reader ought to expect on this occasion: if that sketch approach, though but tolerably, toward correctness, it will answer, as the effect of our (not inconsiderable) labours, and, as affording to the public a mean of greater exactness, in future, and, even at present, a security from error, which may be accepted without contempt.

Whoever recollects the progress of LINNÆUS and his system, will recollect also, that it was not perfect at once; that many articles were removed in later editions from the places they occupied in the first design; and though it must be confessed, that his method became the best adapted of any to give certainty to science, and to fix the nature, and classes of what it included, yet this merit was not originally so striking, as afterwards; nor did it, at its first appearance, receive that applause, which at length it has obtained, by a suffrage almost universal. We must not be surprised, if, in some degree, the same fate should attend the present attempt, and yet, we venture to foretel, that future naturalists, writing on Scripture, will have recourse to somewhat of the same plan, and will find it advantageous to use an arrangement, not unlike in distribution, as the best mean of judging to their satisfaction, when they have ascertained a Scripture subject; and, when they have properly placed it, of knowing where to find it again. This is one of the greatest benefits of system; and hardly inferior to that of obtaining clear and determinate ideas, which may justly be esteemed as the greatest benefit of all.

We could with ease have lengthened the following arrangement, were it only by adding the learned descriptions in the Linnean style, which *professor FORSKALL* has adopted: but such an insertion would look as if we professed more certainty on some things than we really possessed: it would, moreover, have an air of interesting the learned, rather than the public. The fact is, that this part of our work is offered as an attempt—as a beginning of what, should it meet

with public approbation, in these days of system and correctness, may rise from a solid foundation, to a fair superstructure; a kind of appendix to the temple of general science. In the mean time, we are encouraged to believe, that no endeavours designed to render HONOUR to the Holy Scriptures will be totally lost; without some benefit derived from them, either of instruction in knowledge, or of progress in holiness: and this is one of those satisfactions, which the study of the sacred volume produces, beyond that of any other book; while another, and that no trivial satisfaction also, arises from reflecting, that labours like the present, contribute to shew, even in natural things, where it might be thought of less consequence than in spiritual things, that the divine origin of Scripture, the God of nature itself, is not "the God of confusion, but of order."

It will not be thought impertinent, if we hint that we have, in some degree adopted the idea of the eastern origin of Scripture, by occasionally alluding to articles native in those parts: it will be seen too that we have considered KEDem, as a province very far east, and have *supposed*, (if we have not rather *determined*) the migration of Abraham from thence; a much greater distance than has usually been thought. This gives considerable plausibility to the expectation of finding many things in India, illustrative of Scripture, and it accounts for our finding principles common to the Eastern and Western regions of Asia.

Nor can we close these observations, without congratulating the religious world, that a spirit of disquisition is gone forth, which refers very strongly to eastern peculiarities. Beside those works which individuals have undertaken, and published, on this principle, the manner of interpreting Scripture by means of eastern customs, &c. has been made a prize-question at the university of Cambridge, under the will of Mr. Norris; and the essay produced on that occasion, has been published. May this spirit strengthen and increase, till a mode of obtaining knowledge too long disused, recovers that station to which it is entitled, and diffuses information, which, however desirable, may be sought elsewhere in vain!

Much of the following arrangement is translated from the *Flora Egyptiaco-Arabica*, and the *Descriptiones Animalium*, of professor FORSKALL; whom NIEBUHR accompanied into Arabia: but as it is extracted from different places of his work, the reader will excuse some repetitions, which are of little consequence, and less injury. A few articles are from RUSSELL's Aleppo, and some from HASSELQUIST.

We venture to recommend the arrangement itself with some degree of persuasion: but we have not hazarded a more minute or scientific disposition of its lesser branches, than alphabetical order: partly, because much information is yet wanted to enable us to determine absolutely on many specific subjects; and partly, because we would not appear to force our principles beyond what they will bear: the plan is sufficiently regular for popular use; and to shew of what it is capable, under management properly scientific, which we doubt not it will receive in due time, from abilities competent to the undertaking.

BIBLICAL

BIBLICAL ARRANGEMENT OF NATURAL HISTORY.

BOTANY.

I. HERBS, or GRASS. DESHA.

Seeding Seed.

Aloes.
Anise.
— fennel
Bulrush.
CORN.
— Barley.
— Durra.
— Oats.
— Wheat.
Crocus.
Cummin
Hemlock.
Hyssop.
Indigo.
Lilly.
Millet.
Mint.
Mugwort.
Nettle.
Nightshade.
REEDS.
— cane.
— large.
Sesamum.
SOAP PLANTS.
Kali rough.
— asal.
THISTLES.
TREFOILS.
Wormwood.
Zizania.

II. SHRUBS, or PLANTS. OSHEB.

Seeding Seed.

Bramble.
Brier.
Broom.
CUCUMBERS.
— long.
— bitter.
— melon.
— mandrake.
GOURDS.
— flaggon.
— battich
al Henna.
Jasmin.
Mustard.
Myrtle.
ONIONS.
— common.
— garlick.
— leek.
— onion of the desert.
THORNS.
— white.
— black.
— spreading.
— straight.

Rue.

III. TREES. OTJ.

Producing Fruit.

Acacia.
Almond.
Apple.
Ash.
BALSAMS.
— opobalsam.
— kafal.
— katat.
Box.
Carob.
Cassia.
Cedar.
CITRONS.
FIGS.
— common.
— sycomore.
Fir.
Juniper.
Lign Aloes.
Mulberry.
Nufs.
Oak.
Olive.
Palm.
— date.
— doum.
Pine.
Pomegranate.
Rose.
Shittah.
Shittim.
Tamarix.
Teil.
Terebinthus.
Vine.
Walnut.
Willow.

AQUATICS.

I. INSECTS. *SHERITJ.*

1. Apparently without Wings.

ANTS

- of Solomon.
- devourer.
- malignant.

Flea.

Mite.

Palmer-worm.

Scolopendra.

Scorpion.

Spiders.

2. Apparently with Wings.

Beetle.

Canker-worm.

Caterpillar.

FLIES.

— common.

— gad-fly.

— zimb.

Gnat.

BEE.

Wasp.

— common.

— hornet.

LOCUSTS.

— green.

— gregarious.

Grasshopper.

Moth.

3. WORMS.

— earth.

LEECH.

— common.

— horse.

Maggots.

Sepia.

Slug.

Snail.

II. FISHES and AMPHIBIA. *TANNINIM.*

1. Salt-water Animals.

FISHES—GENERALLY.

1. CLEAN.

2. UNCLEAN.

.....

UNCLEAN.

SEALS.

— common.

— lesser.

— manati.

2. Animals partly residing in water, either salt or fresh.

.....

UNCLEAN.

Frog.

TORTOISES.

— water.

— land.

LIZARDS.

— cameleon.

— crocodile.

— dhab.

— gecko.

— guaral.

— newt.

— salamander.

.....

UNCLEAN.

3. SERPENTS.

— chephir.

— kippos.

— okshub.

— peten.

— seraph.

— shachal.

— shephiphon.

— tzeboa.

— tzephon.

— tzimmaon.

— viper.

III. BIRDS. *OUPH.*

1. Air Birds.

* Cuckoo.
DOVE.

— common.

— stock.

— turtle.

— pigeon.

EAGLES.

* — common.

* — bald.

* — osprey.

* — ossifrage.

* — vultures.

* — racham.

* Hawk.

* Kite.

* Lapwing.

Locust bird.

Nightingale.

RAVENS.

* — common.

* — crow.

* Sparrow.

* Swallow.

2. Land Birds.

Cock, domestic.

* Ibis.

* Ostrich.

* Owls.

Partridge.

Peacock.

Pheasant.

Quail.

* Safsaf—*sahaph.*

3. Water Birds.

* Bittern.

* Cormorant.

* Gannet.

* Gulls.

* Heron.

* Hoopoe.

* Kingfisher.

* Pelican.

* Stork.

* Swan.

.....

* BAT

Those marked (*) are unclean.

TERRESTRIALS.

TERRESTRIALS.

I. VERMIN. CHIAH.

UNCLEAN,

having too-numerously divided toes, or claws.

1. Eaters of vegetables.

- Coney, or Shaphan.
- Hare.
- rabbit.
- Hedgehog.
- porcupine.

2. Eaters of living prey.

- Ferret.
- Ichneumon.
- Weasel.
- Mouse.
- rat.
- jerboa.
- mole.

3. Digitated quadrupeds.

- Monkeys.
- apes.
- baboons.

II. LARGE BEASTS, and DOMESTIC BEASTS. BEHEMAH.

1. With undivided hoofs. UNCLEAN.

Ass.

- common.
- generous.
- wild.

- † Zebra.
- Mule.
- Horse.

- common.
- generous.
- CAMEL.
- common.
- swift.
- dromedary.

2. Hoofs divided into two parts.

CLEAN.

BEEVES.

- cow.
- wild.
- buffalo.

- † Camelopardalis.

DEER.

- stag.
- fallow.

GAZELLES.

- antelope.

GOAT.

- common.
- long eared.
- long tailed.
- hairy.
- rock.
- chamois.

SHEEP.

- common.
- broad-tailed.

3. Hoofs divided into more than two parts.

UNCLEAN.

- † ELEPHANT.

HIPPOTAMOS.

RHINOCEROS.

HOG.

- common.
- wild.

III. FEROCIOUS ROAMERS. ROMESHIM.

UNCLEAN,

having too-numerously divided toes, or claws.

1. DOG KIND.

- common.
- greyhound.
- hyæna.
- jackall.
- lesser, or fox.
- wolf.
- desert.

2. CAT KIND.

LIONS.

- ariah.
- chephir.
- whelp.
- gur, cub.
- labiah.
- laish.
- schachal.
- schachaz.

Leopard.

— hunting.

Lynx.

Panther.

Tiger.

3. Anomalous.

Bear.

Badger.

NAMES of PLACES mentioned in the following ARRANGEMENT, indicating where the Plants were found by M. FORSKALL.

In GREECE:

Tenedos.
Imros.
Borghás, fountain.
Dardanelles.
Constantinople.
Belgrade, wood.
Bujuchtari, wood.
Smyrna.
Rhodes.

In EGYPT.

Cairo.
Alexandria.
Rosetta.

In ARABIA.

Lohaia.
Nææman.
Kudmie
Mór.
Surdud.
Melhan.
Beit el fakih.
Hadiens hills.
Djobla.
Moccha.
Taæs.

BOTANY.

FIRST DIVISION—HERBS.

ALOE, SPOTTED; the true aloes.

The *flowers* are yellow; the *leaves* nearly a foot long; the *upright stalk*, a foot and a half long. The whole plant smaller than usual.
Lohaja. Arab. Sabbâre.

At *Alexandria* it had not variegated leaves. In Egypt the flowers of this aloes tree are deposited in houses recently built, in order to dissipate the vapours. *F.*

ALOE, OF THE SHOPS: it has red flowers, full of clusters, slender, and triangular.

The *leaves* are slender without; hollow above, convex below: they have on the edge prickles, opposite, erect, compressed, short; they are close together, flat in the base, and like a sheath; of a green colour varied with white, somewhat red underneath.

Mór. Arab. Sabr. If the leaves are broken they yield a green *pulp*, thick and glutinous, having the rank smell of the *aloes Socotr. of the shops*; wherefore I think that juice the produce of this plant. The true aloes of LINN. has flat leaves. *F.*

ALOES, LIGN. Vide LIGN ALOES, among Trees.

ANISE, strong smelling, grows spontaneously; is called *Schibt*.

ANISE, fennel, is called *sekamar*, or *schamer*.

BULRUSH, JUNCUS, SUBULATED. It has subulated leaves; terminal panicles; a two-leaved subulated envelope.

Alexandria, Arab. Hallæn.

JUNCUS, PRICKLY. It has the envelope of the lowest panicle prickly, those of the upper panicle bristly.

OBS. Those prickly mats (*carpets*) with which the Eastern people cover their floors, are manu-

factured with this bull-rush. They are brought to Cairo from Upper Egypt, and the country about Sués in such abundance, that they export them to Constantinople. They are of a very neat texture. One sufficient for a room of moderate size frequently costs twenty piastres. The art of manufacturing them is very easy. *F.*

For the *Bulrushes* of Moses, vide REED.

CANE, *kanah*. Vide REED.

CORN.

BARLEY, *hexastich*; called by the modern Greeks *krithari*; by the Arabs *schair*.

— *perversum*; called *kophocorto*.

There are several kinds of barley.

HOLCUS DURRA, edible, called *taam*, *habb*, but in Egypt, *durra*.

Taam schebb sædi, with green glume.

T. schær abjad; white seeds, brown glume.

T. schær almar; brown seeds and glume. *F.*

I suspect that this arrangement may illustrate a passage which we confessed exceeded our powers on EXP. IND. Isaiah xxviii. 25. "the principal wheat"—literally, wheat, *shureh*, (perhaps for שורה, *shireh*), and *shoreh* (שורה). This latter, *shoreh*, is no doubt the *schæir* of the Arabs, barley: and what forbids that the first *shureh*, or *shireh*, should be the *shaer*, *durra*, or one of the kinds of millet, which we know forms a principal, if not the very principal, kind of food among the Orientals? But see another word, supposed to signify millet, under the article MILLET.

HOLCUS DURRA, of which there are several kinds.

This bread-corn is subject to a distemper called by the Arabs *ohab*; when the seeds grow the length of your nail, conical and filled with a dark-

dark-brown pulp; which at last bursts through the rind, and makes its way out. (Comp. Consp. Faun. Or. p. xx. n. 5.) EXP. IND. Amos iv. 19.

OBS. This is the commonest bread-corn of the Arabs, from which they make bread that is very insipid to an European palate. They procure three crops every year: 1. *uæsmi*; 2. *chatif*; 3. *akba*. Each requires two months and a half to come to maturity. The first crop is regularly sown; the two last springs from the seeds which were shed. Birds of various kinds are very greedy of the *holcus* when ripe, so that the husbandman cannot by watching, and continual brawling, keep them away. See more concerning this matter in the Editor's Description of Arabia, p. 154, 158. F.

I would call the attention of the reader to two particulars here: 1. the self-sowing of this corn, as it seems to countenance the idea that the "handful of corn on the top of the mountains," Psalm lxxii. 16. may mean *self-sown* corn,—which indicates a *revival*, or *renascence*; and, as we find this corn is called *bar*, it most probably answers to the *burr*, or "wild corn," of the Arabs. The 2d particular is the fondness of the birds for this grain, and the trouble taken by the husbandman to drive them away.

OAT, *avena Pensylvan.* It grows in the desert places about Cairo. Arab. *Sadjaret eddjæmmel*.

—*fatua*. Spontaneous. *Summajr*, or *chafûr*. It is rough all over, flowers and all; a span long. It grows abundantly in the fields.

—*fatua*. Spontaneous. It has the same name as the former. The beards are within the calyx, at the base of the first flower; the husks of the corolla quite smooth.

WHEAT, *triticum*, *spelt*, *hairy*. It is ripe at Alexandria about the end of April. *Zamb, hunta*. It is frequently sown in the same field with the *trefoil of Alexandria*.

In each small ear, and on both sides, is a flower hermaphrodite, fertile, bearded; in the middle one or two proving abortive, male or neuter.

One variety with hairy husks, has oval-oblong ears, an inch and a half thick. Arab. *Zamb næ ajghe*.

Another, with husks somewhat hairy, has ears linear, of the thickness of two inches, and of the colour of rusty iron, with beards somewhat ciliated, and frequently black within at the base. Arab. *Quamh m'ghæjir*.

WHEAT, *triticum*, is cultivated on mountains. Arab. *Burr*.

SPELT, *triticum*, *smooth*. It has very smooth husks; ears linear, and white, of the thickness of two inches and more. Arab. *Quamh stæjri*. Whether it is a variety of the former, or a new species, I cannot determine.

CHICH PEASE, *cicer arietinum*. Garden plant. The pease or fruit are called *homos*; the plant while it has pods, *melân*.

COCKLE. Vide ZIZANIA.

N. B. The "cockle" of Job, xxxi. 40, in the

original implies a "stinking weed,"—which the cockle is not, that I can find. But, from the other plants of a like nature, it is clear that there is no want of "stinking weeds;" yet most probably some specific plant is intended. *Michaelis* says the *aconite*. But vide EXPOS. IND. on Deut. xxxii. 32.

CROCUS, in our translation rendered *Saffron*. Vide Cant. iv. 14. EXP. IND.

CUMMIM. Arab. *Kamûn*, brought from Upper Egypt. F.

The Arabic name appears to identify this plant.

DARNELL. Vide COCKLE and ZIZANIA.

HEMLOCK. In Amos vi. 12. we read of "righteousness turned into *hemlock*;" the very same word which in chap. v. 7. is rendered "turn judgment to *wormwood*." This impropriety is obvious; the word is usually rendered *wormwood*. Vide Deut. xxxii. 32. EXP. IND.

HENBANE. *Hyoscyamus dator*.

It is very plentiful in the deserts of Cairo, that are sandy, and exposed to the sun. Arab. *dâtora*; by others *sekarân*. If the powder of this plant is by a malicious hand given to any one to drink, it renders him insane, and he does not recover the use of his reason till several days after. F.

Is there any allusion to a plant of such properties in Scripture?

HYSSOP is mentioned as one of the smallest of herbs, 1 Kings, iv. 33. It is a herb of a bitter taste, and grows on the mountains near Jerusalem. The hyssop of John, xix. 29. is probably what is called a *reed*, or *cane*, Mark xv. 86. Matt. xxvii. 48.; or else this hyssop was like a sponge imbued with the drink; and perhaps it was a handful gathered of the nearest herbs to the spot, which might be mostly hyssop.

HYSSOP. The *mosses* and *lichens* are rare in the Levant. The pyramids have no *lichens crustacei*: the walls of Jerusalem are covered with them. There grows out of the city, near the fountain of Solomon (q. *Siloam*?) a very minute moss: is not this the hyssop? It is at least as diminutive as the cedar is tall and majestic." HASSELQUIST's Letter, Sept. 22. 1751.

INDIGO plant. INDIGOFERA, HOWER.

It grows spontaneously in the fields at *Surduâd*. Arab. *hower*.

OBS. This species, which is the dye of the Arabs, is every where cultivated on account of its blue colour, of which the inhabitants of both sexes are remarkably fond.

The plant being cut down, is spread abroad and dried. It is then put into large casks up to the middle; spring-water is poured in to the brim. Thus it undergoes a fermentation during two hours. Then it is well mixed by a cane, that has four small sticks fastened across at the bottom. The floating leaves are taken out. The water, which is green and unserviceable, is let off by a hole half a span above the bottom of the cask. The sediment is the indigo. A round hole, not deep, about two yards in diameter, is made in the ground;

ground; it is covered over with the leaves that were at first rejected, made small, and on this layer the indigo is spread to dry. This dust, however, always adulterates the bottom of the mass. *F.*

I take for granted, that from this plant the Hebrews also procured their blue dye, which was greatly valued among them. Is the plant itself any where intended in Scripture?

JUSSIEA, EATABLE. *Its stalks are prostrate; it has deeply-petiolated leaves, ovated, folded, and serrated at the edge; flowers with four petals and eight stamina.*

The clusters of flowers are axillary. The seeds are ripe at the end of December.

Lohaja. Arab. *uaki.* It is eatable; and is dressed after the manner of pot-herbs, or mixed with the bread of *Durra.* *F.*

We find several seeds employed in the same manner in scripture: is this among them? Vide **SESAMUM.**

LEEKs. Vide **ONIONS, &c.**

LENTILES. Vide **EXP. IND. 2 Sam. xvii. p. 97.**

LILLY. **PANCRATIUM ILLYRICUM.** Succory.

The *stamina* are of the length of the nectaria. The *bulbs* are white and large.

Alexandria. It is a garden plant. Arab. *Susann.*

OBS. Is this the *shushan* (שושן) or lily of Jews? The very learned **CELSUS** supposes that plant to be the *white lily.* It has a great resemblance to this *pancratium*, which in whiteness surpasses lilies, and the most perfect white produceable by the art of dyeing. White dresses were formerly reserved for the masters of the sacrifices: May we hence conclude, that this, as well as the purple, was an appendage to royalty? *F.* The **WHITE LILY** is called *zambak.*

The pretensions of this plant to be the *lily of scripture*, are much diminished by its being a *garden plant*: if it grew wild, it would, from the character given of it, seem very likely. A figure of this plant might enable us to trace the form of the *lily work*, 1 Kings, vii. 19. which clearly was *expartite.*

MANDRAKES. Vide **CUCUMBER, schemmâm.**

MELONS. Vide **CUCUMBER.**

MILLET. This word occurs Ezek. iv. 9.; and some have suspected that it also occurs Isaiah xxviii. 28. It is called *duchan*, or *dochan*, in Ezekiel, and probably is the *holcus durra.* Vide **CORN.** Its Latin name *millet* is supposed to derive from *mille*, q. a *thousand* grains, so prolific is it in its nature. *Durra*, says Niebuhr, is a kind of *millet*, made into bread with camel's milk, oil, butter, &c. and is almost the only food eaten by the common people of Arabia Felix. "I found it so disagreeable, that I would willingly have preferred plain barley bread." This illustrates the appointment of it to the prophet Ezekiel as a part of his *hard fare.*

MINT.

MUGWORT, ARTEMISIA. Garden plant. Arab. *Sjæbe*, implies *hoary hairs.* This name is given to other plants that have hairy ash-coloured leaves, and to the *lichen.* It has some resemblance to the Hebrew שיבה (which signifies *hoary, grey-headed*).

———— *abrotan?* **SOUTHERNWOOD.** Garden plant. *Simsuk*, or *msaka.*

NETTLE, URTICA, palm.

DESCR. The *pedicles* are axillary, formed like ears of corn, and spread out. The males are headed; the females have a spine the thickness of an inch; spread out, stiff; rough, branching, and pinnated; bearing flowers only underneath. It has four *stamina.* The seed is close, delicate, and roundish.

It grows on *Yemen* in the mountains. Arab. *Schadjâret el mehâbbe*; that is, *plant of love*, ironically so called. *F.*

Observe, 1. The naming of this plant—*ironically.* 2. It is a mountain plant. We have supposed, nevertheless, it was appointed to the flats of *Babylon.* Isaiah xxxiv. 11.

NIGHTSHADE, SOLANUM, hoary. *It has a prickly stalk, and yellow coriaceous berry.* It grows on a moist clayey plain, pretty near mountains, and in the lower region of mountains. *Æjin al bagar*, that is, "cow's eye." *Môr.*

NIGHTSHADE, SOLANUM, black. C. ii. 49. The juice of the fresh leaves is applied to a wound after cauterizing; and to a disease, called by the Arabs, *bulæ.*

[*Bulæ*, a disease to which the Arabs are subject, unknown to the Europeans. It is a corroding wound without pain, which being healed, there remains a scar, as after the small-pox. The leaves of the black *solanum*, being bruised, and applied for three days, prove a certain cure.

It grows spontaneously, and is called *enabed-dib*, "wolf's grapes."]

SOLANUM, EGYPTIAN. I have seen two varieties, so conspicuous, that they might be taken for two different species.

It has red fruit, and smooth leaves, rather angulated.

A red fruit, *solanum*, differs from this by having its leaves somewhat round-oval, frequently angulated and hairy, together with the stalk; petioles not alated, with lateral filiform pedicles, and terminating with a nodding umbel.

SOLANUM, black fruit. *Its leaves are entire and very hairy.* Opposed to this, there is a black fruit, *Solanum*, the leaves of which are oval, lanceolated, smooth, entire, somewhat ciliated, with alated petioles, and lateral pedicles, with a nodding umbel.

The Arabic name of both is *einab ed dib*, that is, *uva-lupi*, "wolf's grapes." It grows in all the garden and cultivated grounds in *Egypt.* The raw berries are eatable. They are ripe in May and November. For the head-ach the juice is squeezed from the leaves and rubbed on the forehead; they likewise anoint lame feet with it.

SOLANUM,

SOLANUM, HOARY.

At *Uafad* I found the fruit yellow and coriaceous, of the thickness of an inch.

At *Djöbla*, Arab. *ennæma*, or *æjn el bagar*: *Uahfad*, *ersan*.

The *Solanum incanum* is called *æin el bagar*, "cow's eye:" also *ærsen*.

The fresh leaves are applied to wounds. In the tooth-ach the smoke of the leaves is taken by means of a tobacco-pipe.

The leaves of this plant and *physal somniferæ* boiled in water, are used to wash persons who are suffering under strong hypochondriac disease, which by the ignorant is called *demoniacism*. Vide EXPOS. IND. Deut. xxxii. 32.

REEDS.

REED, or CANE, ARUNDO DONAX. *It has leaves deeply-lanceolated; smooth in the base; moss within the calyx.*

DESCR. The stem often branches out 8 or sometimes 10 yards in height. The panicle terminal, opening according to the direction of the wind, yellow.

The leaves frequently double, green, having underneath the middle nerve a whitish base; flat, white in the base; not ciliated at the edge, but at the upper part of the base; the longest in the middle, which encompasses half the stem; the beard near the cod is membranaceous ciliated. The last leaves of the base are hairy at the point. There are 3 or 4 calyces to a flower; the panicle spread abroad; each other shell of the corolla is bearded.

It is very common by the rivers of *Yemen*. Arab. *kasab*. At *Rosetta* it grows in ditches. It is called by the Egyptians *buz*, the common name for a cane: when they speak of this as a species, they call it *buz haggni*.

ARUNDO, the largest; the leaves ciliated at the edge, white at the base, hairy-ciliated, flat, all over green.

The younger leaves have all a ciliated rough edge; which roughness, disappears in time. At the base, however, all the leaves have a hairy ciliated edge.

It grows abundantly. It is different from the *Donax haggni*.

OBS. The *donax* and *sugar-ganesj* not only cover the banks of the Nile, but entirely obstruct it, like the *alder-tree* in the North, and the *mangle* in the Indies. The Egyptians employ these canes very advantageously for quick set hedges, which are not only of the most delightful green colour, but they grow up to the remarkable height of 6 or 8 yards. A ditch encompasses this fence of canes. It is usual likewise to fasten the outer canes together, by two rows of bands made of the leaves of the palm tree. In the peninsula of *Râsettin* I saw another contrivance for defending the gardens, no less laborious than foolish; for each tree is surrounded by a hedge made lattice-wise,

of the leaves of a live palm-tree, twisted over each other. This enclosure only lasts one year. That appears to me no less absurd, than to have a field and a garden in the same field.

GHOBEIBE, is a marsh about the space of 8 hours distance from the city of *Sués*, and lying to the south of it. Here likewise fountains of hot running-water stream out. Here grows an immense wood of the canes, *Phragmit*, and *Calama magrostes* 12 yards high, which Nile does not produce. The stems are conveyed all over Egypt and Arabia. These canes with earth thrown over them, contribute to construct the flat terraces on the roofs of the houses.

Tradition will have it, that MOSES passed through the sea, which was divided, to allow him a passage from his station, at *Ghobeibe*. However that may be, it appears, at least, probable that this extensive region of canes, gave name to the *Red-sea*, which in those times not only flowed up to it, but by which it was entirely inundated. *Jam suph* is a sea that produces canes: and as the Arabs denote two sorts of canes by the generic name *buz*, the surname being added afterwards, *Moses*, the sacred historian, following the same ancient denominations, did not attend to the specific niceties of botanology. This same leader of the people underwent the first dangers of his life in a cradle made of the reeds, *donax*, or *haggni* (Exod. ii. 2.) Reeds do not grow on the shores of the *Red-sea*, except there are fountains and marshy places, as at *Ghobeibe*; which are seldom to be met with. F.

This information induces us to conclude, that in these reeds, which cover the banks of the Nile, we have what our translation renders the *flags*, (*suph*) in which *Moses* was concealed in his trunk, or ark of bulrushes, *goma*. The remarkable height to which they grow, and their plenty, lead to the persuasion that in some thick tuft of them, the future prophet of Israel was concealed: Exod. ii. 3. Observe, also, the interrogation of Job viii. 11. "can the rush—*goma*—rather, the tall, strong, cane, or reed, grow up—to its full height, without water?" surely not; if deprived of that nutriment it must wither, verse 12. The latter clause might perhaps be well rendered "can the *achu*—the trefoil, grow without waterings?" (plural) [vide TREFOIL.] meaning those labours bestowed by man in its cultivation; wherein it differs from the *goma*, which enjoys the permanent marsh, or river. N. B. Both these plants are entirely Egyptian. This *goma* is with great propriety, being a tall reed, associated with the *kanah*, (cane,) Isaiah xxxv. 7.—"a court of canes and reeds."

THE SWEET-SMELLING REED, *Schaenanthus officinalis*, is common in the deserts of the two Arabias. It is gathered near *Iambo*, a port-town of Arabia Petrea, from whence it is brought into Egypt. The Venetians purchase it and use it in the composition of their *theriaca*. This plant was

very probably among the number of those which the Queen of Sheba presented to Solomon; and what persuades me to this opinion is, that it is still very much esteemed by the Arabs, on account of its fragrance. They call it "*helsi meccavi*, and *idhir mecchi*." HASSELQUIST.

This, in all probability, is the *sweet cane* of Jer. vi. 29. where it is called *prime*, or *excellent*, and is associated with incense from Sheba: the same in Exod. xxx. 23. where our translation renders "*sweet Calamus*:" see also Isaiah, xliii. 24.: also EXPOS. INDEX, on Exod. xxx. 23. where the best is supposed to come from India, which agrees with the "far country" of the prophet.

SESAMUM, INDIAN.

The *callus*, or hard substance, is somewhat globose, yellow, hollow in the apex, perpendicular to both sides of each wing in the upper stalk, whether the pedicle be there or not.

It is cultivated every where in Arabia. Arab. *djyl djylán*. It is called by the Egyptians *semsem*.

They procure from it an oil (Arab. *salit*.) useful for culinary purposes, and for burning in lamps. F.

It will be seen in EXPOS. INDEX, on Isaiah xxviii. 25. that we did not well know what to make of the *appointed* barley; and it appears that the lxx. and Jerom took this word to mean another kind of cultivated plant—this acceptance seems to be proper; and we have to consider what plant it can be. The original stands *nisman* (נסמן) which Mr. HARMER, p. 95. vol. iv. would transform to (ורחן) *ve dochan*, which signifies "and millet"—but thinking this too great a departure from the text, I would rather read, *sesamun*, (ססמן-נסמן) which varies one letter only; and that by the mere omission of a stroke to complete its form: the facility of this, I need not remark. The passage then would read—"he casts abroad the *wheat—barley*, and *sesamun*—in their places." N. B. If we suppose the letter s (ס) to have been omitted here, then we may take the N for v, (ו, י,) "*and sesamem*," otherwise we may read according to the Egyptian name, "*and semsemun*," (סמסמן) supposing the first syllable omitted.

SOAP PLANTS.

SALSOLA KALI, ROUGH. I should suppose the *edges* of the calyx, (*Syst. N.*) met together with female or castrated, and not hermaphrodite. flowers; as this is likewise the case in other species of the *Salsola*.

The smooth plant is found in great plenty on the coast of *Natolia*, over against *Tenedos*: and is afterwards found mixed with the rough, on the coasts of the *sea of Marmora*, between the villages *Eraclissa* and *Merafte*.

SALSOLA, *weak kali*. It grows on a clayey plain (*Sinai*.)

Several other kinds of *Salsola kali*, are found plentifully between Alexandria and Rosetta, at

the fort of Boukir; and in the deserts near Cairo, even in the moving sands around the pyramids: it flowers the beginning of March. Arab. *æræjum tartir*. Another kind is called *sjök al hanasch*, "serpents' thistle;" because they creep under it, and lie down: it grows near Alexandria, at the Catacombs. Flowers the end of September; in the hottest of weather; the driest of plants.

SALSOLA IMBRICATA. Arab. *harm*, is grateful food to camels.

SUAEDA MONAICA.

It has one large *seed*, covered with a calyx. It is a low, spreading shrub, growing as big as a tree, and has flowers almost the whole year. Alexandria and Lohaja. Arab. *asal*.

OBS. This is the plant from which the Yemen Arabs extract *hötam*, or *döluk*, that is, *sal alkali*; which they dissolve in water, and soak their clothes in it, before they are washed with soap, which is a valuable commodity in these parts.

SUAEDA, *asal*. From this is procured *hotamor* or *döluk*, i. e. *alkaline*. Is it the *borith* of the Hebrews, used by their fullers; or may it give any light on that article? F.

SPIKENARD. Vide on Canticles, iv. 13. Plate.

STAPELIA, *sak el ghörab*. Not eatable. Reported to be a foreigner. Though it appears to be entirely dead, yet it will revive after a long time, if the earth around it be watered. F. Was this one of the plants Job had in view? xiv. 9.

TARES, vide ZIZANIA.

TANSEY, TANACETUM, *balsam*. Gardens of Const. Κόστα. *Garden costus*, or *zedoary hortulan*.

Its leaves are nicely divided; they are strewed for ornament on lettuce prepared for the table. F. So that it might be, as the Rabbins say, among the bitter herbs eaten with the Pashal lamb.

THISTLE, TRIBUNUS, *hexandrus*, with hermaphrodite flowers, and six stamina. It grows on a moist clayey plain, pretty near mountains: Kotaba, Lohaja, Kurma. F.

It is likely that there are several kinds of thistles in the East; and probably more than one kind is mentioned in Scripture, vide Gen. iii. 8. Kutj. Hosea x. 8. Dardar. And 2 Kings xiv. 9. Coach. EXPOS. IND.

TREFOILS. TRIFOLIUM, ALEXANDRIAN; Arabic, *bersim*: others call it *bursüm*.

DESCR. The *corolla* has only one flower leaf. The *verillum* or banner, is linear-obtuse, and longer than the *alæ*. The stalk of the *ala* is thick at the base, and swells a little. The *stigma* budding out towards the *verillum*.

OBS. This is the trefoil which the Egyptians cultivate in all their lands; it is the best and almost the only food for their working cattle. It is not sown twice every year like other corn, but on the decreasing of the Nile. Where the lands are high, the water is conveyed by hydraulic machines, and the seeds are committed to the ground

ground while wet. Trefoil yields three crops. Every time it grows up half a yard: each crop requires three months; after that it dies. The first math is the best, and is called *rās*; the second and third *ribhæ*. It is by a remarkable regularity of tillage, sown in the same field with wheat; (that is, when it is designed for seed.) This mixed seed is called *chalit*. The harvest both of the trefoil and the wheat takes place at the same time, but it is not performed with a sickle; they are both drawn up by the hand close from the ground, the root being left, they are then bound up in separate bundles; they are likewise threshed together. The trefoil seeds are separated by a sieve called *orbal*.

TRIFOLIUM, *melil. Ind.* trefoil. Spontaneous: very common; *rekrak*, *ryjam reinâm*. The pulse rounded in an oblong form.

TRIFOLIUM *mel. diffus.* or having two horns. It grows in the desert places about Cairo, *Gurt*, *Djulgân*.

— *Alexandrian, sativæ*, everywhere. *Bersim*, or *berzûm*.

— *fragiferum*, that produces berries. Spontaneous.

— *meadow*, trefoil, Belgrad *Τριφύλι*.

— *red*, Borghâs Fountain.

— *starred*, Imros.

— *melilot*, Smyrna, the flower either white or blue. *F.*

We have supposed the *trefoil* in some of its varieties to be the *achu*, or cultivated grass, on which the kine seen by Pharaoh in his dream were feeding,—not “in a meadow”—as in our

version: the character of these plants given above, justifies our idea.

VETCHES, vide CHICH-PEA.

ZIZANIA, ZEWAN, DARNEL or COCKLE, very well known to the people of Aleppo.

It grows among corn. If the seeds remain mixed with the meal, they render a man drunk by eating the bread. The reapers do not separate the plant; but after the threshing, they reject the seeds by means of a van or sieve. Vide TREFOIL.

SCHEILEM is likewise an injurious field plant, but of a different species from the former. By a decoction of this plant a man's senses are weakened, and he is obliged to undergo a surgical operation, as *Avicenna* relates. *F.*

Nothing can more clearly elucidate the plant intended by our Lord, Math. xiii. and rendered *tares* in our version, than the above extract.

1. It grows among corn: so in the parable.

2. The reapers do not separate the plants: so in the parable; both grow together till harvest.

3. After the threshing they separate them; in the parable they are gathered from among the wheat, and separated by the hand, then gathered into bundles. For a similar method of procedure, vide the instance of the trefoil which accurately illustrates that particular manner of reaping.

4. Their seeds, if any remain by accident, are finally separated by winnowing; which is, of course, a process preparatory to being gathered—the corn into the garner, or store-house; the injurious plant into heaps for consumption by fire, as weeds, &c are consumed.

SECOND DIVISION—SHRUBS.

BRAMBLE, RUBUS, *shrubby*. It grows on the middle and higher regions of mountains, *Næfæs*, *Bulgoe*, or *Hadie*, *Hommæs*. OBS. A certain learned man affirmed that this rubus is called in the books of the Arabs, *ölleik*, which name is given in Egypt to a genus of the *convolvulus*. The lxx. have translated the word, Exod. iii. 2. *Βάλος*; and from them the Arabian versions which came after, as the Copto-Arabian and others have rendered it, whence it appears probable that this was formerly the Arabian name of the *rubus*. *F.*

We have supposed that this is the *atad* of the Hebrew, and nothing seems to oppose this opinion.

BRIERS.

1. *Chedek*. Vide EXPOS. INDEX. Prov. xv.

2. *Sclun*, *selunim*. Vide on Ezekiel, ii. 6.

3. *Shamir*. This word appears to be used only by the prophet Isaiah, and always in conjunction with thorns, *shit*; it probably is a brier of a low kind, such as over-runs wilderness-places, or uncultivated lands.

BROOMS.

GENISTA, *rætem*, broom; (*spartium*, Spanish broom,) it has single leaves; alternate and striated branches, oval fruit, with one partition.

The flowers are white and sessile; the seeds in two rows, as in those that have two partitions; they are not, however, separated by a membrane.

I have seen this plant which is brought from the deserts, at *Rosetta*; I afterwards found it growing in great abundance in the sandy plains about *Sués*; it was of the height of a small shrub. Arabic, *rætem behâm*. (It makes good coals)

The root is very bitter: the Arabs drink a decoction of it when afflicted with the heart-ach (hypochondria.) The herb steeped in water is applied to wounds.

Is this *genista* the same as the Hebrew *retem*? (רתם) The Arabic name, preserved in Spain from the time of the Saracens, is still pronounced *retamas*. (Compare *Osbeck*. Itiner.)

It is the symbol of *Poverty*, (Job xxx. 4, 5.) and of a man wandering in a desert, who has no

sustenance left, but what this root furnishes; which no Arab desires to taste, on account of its bitterness. It denotes likewise barren, dreary places, without trees or any other shade; the shrub itself having only a few branches, and those a great distance apart, is a wretched shade in a hot, open field: (compare 1 Kings xix. 4.) When thrown into the fire it makes a *crackling* noise like juniper; this mark is very apposite to an unpleasant irascible disposition, (compare Psalm cxx. 4.) *F.*

Ratam is also the Arabic name of the *atriplex coriacea*, or leathery orach. *F.*

The reader may see on 1 Kings xix. EXPOS. INDEX, our wishes to refer the Hebrew *retem*, to the juniper tree,—yet we cannot resist the evidence of M. FORSKALL, which strongly inclines to the *broom*. We observe in his account, 1. That it makes good coal, and by *coal*, I apprehend he means *charcoal*, at least it is certain that caravans loaded with charcoal, come from the deserts to Cairo; and DENON says, that one composed of five hundred camels entered Cairo, bringing productions of the deserts, even so far as from Mount Sinai, charcoal, gums, &c.—but charcoal seems to have been its principal lading. By uniting the professor's testimony, with that of DENON, I conclude, that charcoal made of the *retem* was what they brought. To apply this to Scripture, take the passage, Psalm cxx. 4.

*What shall be done to thee, thou false tongue?
Thou vibratest flashes like a mighty weapon,
Thou flashest like glowing coals of RETEM.*

M. FORSKALL has taken the *crackling* noise, (I suppose accompanied by *sparklings*) in explanation of this passage. I think we may suggest two ideas: 1, That charcoal, though kept for years, is ready to take fire at any time: 2, Whoever has been accustomed to the burning of that kind of charcoal called *whole-coal* among ourselves, must have noticed that many pieces of it burn with a sulphureous smell, and they explode a considerable number of sparks, which spread in all directions around them, and are capable of doing considerable mischief, if they fall on combustibles (burning *peat* is remarkable for the same property)—if the *vibrations* in the verse before, are the flashings of a threatening weapon of steel, &c. polished bright, which, from the use of the word elsewhere, seems plausible, then this may be accepted as the idea of the present versicle; if not, perhaps, we cannot do better than accept the first-mentioned import.

In another passage, Cant. i. 17. we read [in the attempt to arrange this poem, published in the FRAGMENTS to CALMET.]

*The beams of thy palace are Cedars,
The ceiling joists [rafters, Eng. Tr.] are
of Fir, retem.*

This stands in our printed *Heb.* copies not

retem, [q. *be-retem*] but *brutim*, and is usually supposed to be a variation for *brushim*, which would signify *fir*. As this variation, nevertheless, seems rather too considerable to be accounted for merely by mis-spelling the word, I would try what effect the accepting of *retem*, broom, may have on the place. Observe, 1st, That it may be doubted whether the word *rahethim* signifies *rafters*; the word *rahethim*, in chap. vii. 5. rendered *galleries*, certainly signifies foldings, plaitings of the hair, which form alternatively a lighter and a darker diaper kind of shadings, as it were, chequers: now, as in works of wood this is produced by marquetry, a kind of inlaying, it may be justly suspected that this word denotes floorings figured into patterns by means of crossing pieces of wood which compose them. This corresponds perfectly, by opposition, with the former versicle: the *upper*—the ceiling-beams, for instance, those in *high* stations in the royal palace, are of cedar:—the floors, those of *low* stations, are inlayings of *retem*; in short, this is perfectly coincident with the rendering of Buxtorf, *ambulachra*. I believe almost, if not quite, all our royal palaces, and noblemen's houses, which were constructed before the use of carpets became so general among us as it is at present, are of this nature; and when polished by daily rubbing, the oaken floors of our forefathers became *slippery*, to a very high degree. I am sure I have cause to remember it, for so very *polished* was the surface of the floor in the palace of Versailles, that I could hardly, with my utmost exertions, get safely out of the king's way, when he was passing—but that was in the days of the good king Louis!

Now, supposing the floors of apartments in Solomon's palace to be inlaid—were they inlaid with *retem*? broom.—Does broom afford *planks* for this purpose? The most extraordinary instance of size, in broom, that I know of, is mentioned by PENNANT in his *Journey to Scotland*, 1769, page 118. "The most singular piece of furniture, (at Athol-House) is a chest of drawers made of broom, most elegantly striped in veins of white and brown. This plant grows to a great size in Scotland, and furnishes pieces of the breadth of six inches."—It is then evident, that this plant might furnish inlayings of sufficient dimensions. I have said so much, because I had hinted at the *retem*, in this passage, and the marquetry of it, on a former occasion; but would by no means oppose the renderings of the lxx. and Vulgate "*the cypress tree*:"—whatever it was, if it were used in small pieces only, we have no occasion to seek a large tree; among ourselves the smaller trees, holly, yew, &c. are used in inlaying.

Perhaps there is yet a more simple view of this passage:

Our very floors are inlaid—

taking *rahethim* to signify a *boarded floor* of a house

house, (for which I do not recollect any word in Scripture) and *rutim* to be analogous to Micah i. 13. "*bind* (*rutem*) the chariot to the swift beasts." Inlayings are certainly *bindings*, contignations, compactnesses; they cannot be too exactly united; and in such case, this word may derive from the root, *berit*—a union, a pact, a covenant; which has been the opinion of the learned, though they never could state its connection, or regular derivation.

If the *retem* grows to the magnitude of a small shrub, we need not wonder that the prophet Elijah, in the midst of a desert, sought its shadow as a refreshment; not because it was noxious, or as manifesting his indifference to life, as some have supposed. It appears, too, that he was then fleeing in the desert, from whence the Arabs now bring charcoal; which explains what the lxx. meant by rendering Psalm cxx. 4. *coals of the desert*; and elsewhere, *coals of juniper*, taking *juniper* for the broom, or *retem* of the desert.

I am not certain whether that most difficult passage, Job xxx. 4. "they cut up *juniper* (*retem*) roots for food," may be in any degree illustrated by the application of the word *retem* to another species of plant—the *atriplex* or *orache*: whether this grows in the desert; and whether the roots of it be edible, or in what degree they may afford nutriment to those pressed by hunger. It is, however, some satisfaction to find, that this name is applied to other plants than broom, since the roots of the broom, *retem*, are described as extremely bitter. Perhaps this observation, properly followed, may lead to the plant intended in Job; notwithstanding the word *retem*, in other passages, may denote, in confirmation of the opinion of the rabbins, the *genista spartium*, or broom.

N. B. M. FORSKALL notices the crackling noise made by the coal of *retem* when inflamed: is not this in some degree similar to "the crackling of (coals of) thorns under a pot," and so to "the laughter of a fool?" Eccles. vii. 6. *i. e.* incessant trifling, teasing, when he is warmed, &c. &c.

CUCUMBERS OF VARIOUS KINDS.

CUCUMBERS, CUCUMIS, *sative*. Gardens of Constantinople. Fr. *concombre*. The fruit is long. It is eatable, and prepared with various art. [Arab. *chiar*. H.]

— *anguin*. *ibid.* *κολοκυνθια*, bitter cucumber. Turk. *tolmach chappach*.

It has large white flowers; the fruit, while young, is rough and woolly; when full grown, smooth. *F.*

"The COLOQUINTIDA grows in the desert; buds and spreads itself during the season when the nights are cool, which is after the inundation, and when some rains in the mountains produce a little water in the plain. This plant spreads itself;

and the melons which it produces form themselves. One part of the leaves is eaten by the gazelles, the remainder is devoured by drought: defended by their bitterness, the fruits alone remain till the next year; when the seed sows itself and continues this vegetation, the most characteristic of the small number of plants which grow in the desert." DENON, Exp. of his plate lxii.

CUCUMIS, MELO, *melon*. Arab. *dummeiri*. Cairo.

The *flower* is yellow; the *fruit* globose, flat at each extremity, and sweet.

The *melon*, says HASSELQUIST, is called in Arabic, *kaun*.

CUCUMIS, CHATE. Arab. *abdelvari*, or *adjir*.

The *stalks* are taper, and have rough bristles; the *leaves* are lobated, rough on both sides, and have obtuse angles; the *flowers* are yellow; the *fruit*, while young, is rough, when ripe, smooth, and smaller at each end. It is eatable raw, as are many other kinds.

It is the commonest fruit throughout Egypt, and is planted in all grounds. Many make of it a drink of a most agreeable taste. A hole is cut in the center, when the fruit is ripe, and while it continues on the stalk. A stick being thrust in, the pulp is bruised and mixed; the hole is then stopped up with wax. The *melon* is lastly placed in a hole, dug as near as possible, and very carefully buried, lest it should be broken off from the stalk. After several days the pulp is taken out, it being then dissolved into a very delicate liquor.

C. S. BATTICH DJEBBAL. Arab. *battich djebbeli*. It is cultivated by the Arabs inhabiting the mountains. The fruit not large, and very sweet.

C. S. BRULLOS, Arab. *battich brullosi*. The *brullos* is cultivated at the promontory of the Delta.

The *fruit* is sometimes a cubit in diameter; extremely sweet; white within, but frequently red.

C. S. ENNEMIS. Arab. *battich ennemis*. Cairo. Not very common.

The *fruit* is somewhat cylindrical, often a cubit long; yellow within; seldom red: it is very delicate.

C. S. SCHEMMAN. (*Dudaim*. Spec. Plant.) Arab. *schemmam*. Cairo. Cultivated in gardens.

The *stalks* have five furrows, and rough bristles; they climb, and have *cirri* (creepers or tendrils.) The *leaves* are cordated, oblong, pointed, somewhat sinuated, denated, bowed, and rough. The *calyces* are hairy and soft; the *flowers* are yellow, and close together in the *alæ*; and the fruit is globose, oval, very smooth, of the size of a citron, yellow, and has unequal spots of a dark tawney colour, inclining to yellow, and meeting together in lines toward each end; the fruit is variegated like the citron; the pulp is watery, and quite full of seeds. The fruit, while young, is hairy; when ripe, smooth. The smell is strong, and not unpleasant

pleasant, and on that account it is cultivated: it is not eatable. *F.*

The reader has seen our perplexity on the nature of the *dudaim*, or mandrake of Scripture: we had already placed it among the melon kind, on the authority of LE BRUYN; and now we have the support of Linnæus and professor Forskall. Observe, it is a garden fruit; probably, therefore, not a native of Egypt (or Syria), but a foreigner. He says the smell is strong, and not unpleasant; and it is cultivated for its scent: but he does not attribute any virtue to this scent, as some have imagined in the *dudaim* of Rachel. Observe, also, that the *dudaim* of LE BRUYN are not only pleasant in respect of scent, but are extremely pleasant in respect of taste; so that I think we may well suppose that in its own country a species of this fruit has a delicacy very superior to what it has in Egypt. Those which Reuben found in Mesopotamia were *in the field*, in some small copse of wood perhaps, or shade, where they had come to maturity before they were found. If they resembled those of Persia rather than those of Egypt, to which conclusion every circumstance leads us, then we see their value, their superiority, and perhaps their rarity, which induced Rachel to purchase them from the son of Leah.

Further, M. FORSKALL says the smell is *strong*; which is what the bridegroom in the Canticles observes also: "Our *dudaim* give a smell." And these *dudaim* we find, by the connection, are *garden* plants; so that in Judea, as well as in Egypt, they were not native, but cultivated.

DARNEL. Vide ZIZANIA.

DIANTHERA ODORA, named *kejselmân*, frequent in the woods near *Surdûd*. It smells but little till withered. It is grateful to the people of Arabia, who on festival days ornament their heads with crowns made of its leaves. *F.*

Crowns are so little in use among us, that we distinguish the supreme magistrates of countries by the phrase "crowned heads;" but in the East they are worn on many occasions which require demonstrations of joy. (Comp. Eccles. and Job). Job, xxxi. 36. speaks of binding a crown on his head, which we are not, I presume, to take as a royal crown (that would not need binding), but as one of those tokens of rejoicing which the custom of his country demanded at proper opportunities. But we have this custom described at full length in Wisdom and Ecclesiasticus:—"Let no flower of the spring pass by us; let us crown ourselves with rose-buds," chap. ii. 8.—"Wisdom weareth a crown, triumphing for ever," chap. iv. 2.—"The fear of the Lord is a crown of rejoicing," Eccles. i. 2. These passages lead us to the true import of the crown of thorns, placed by the Roman soldiers on the head of our Lord—it was a derision of his inauguration as king of the Jews: and it was not a tarnished *golden* crown which

they employed, but a prickly vegetable one; to *degrade*, in a very expressive, and intendedly ridiculous, manner, the *triumphant* occasion on which they thus bedecked him. The use of crowns among the victorious *athletæ*, or combatants in the games of antiquity, are well known.

EUPATORIUM, scented agrimony, or liverwort. On account of its fragrance the Egyptians usually throw a great quantity of it into the sepulchre when they bury a corpse. *F.* Job supposes the sepulchre of a person may be fragrant to him; xxi. 33. Is there any allusion to this custom?

FLAGS. Vide BULRUSH, and REEDS.

FLAX. Arab. *kittan*.

GARLICK. Vide ONIONS, &c.

GIT, or GITTITH. Vide ANETHUM.

GOURD, CUCURBITA, *flagon*. It is cultivated at Cairo. Arab. *qarâ m'dauer* (*charrak*, H.)

It varies, and has globose fruit; or globose at the base, then diminishing.

It is not eatable; but is a very fit vessel for *flagons*, being light, capacious, and smooth, frequently a foot and a half in diameter. The fishermen usually fasten the empty gourds to their rafts of canes, that they may float lighter. The fruits of some other kinds are dressed and eaten. Some of them are a yard in length.

CITRULLUS, *battich*, so called by the Egyptians;—by the people of Môr, *Dubba sarakis*;—by the people of Aleppo, *djabas*: the *agethim* (אגתים) of the Jews.

The Arabs distinguish this *battich* from the *bartich*, the *true citrul*, and say that the fruit, when ripe, turns of an ash colour.

The leaves are multifidous; the *corolla* quinquefid: the superficies of the *seed* is painted with very remarkable turnings of lines, as in a figured stone, which the imagination traces into various figures. A citrul was lately opened at Alexandria, in which all the seeds were figured, which is very rare. Eaten dressed, as are some other kinds. *F.*

The above is additional evidence that the Hebrew word *cali* may signify vessels, i. e. *containers*; and may be so taken, Isaiah xviii. where the prophet alludes to *light* embarkations of *reeds*, &c.

I suspect also that something of a fruit is intended by the bride, Cant. ii. 5. "Stay me with *flaggons*,"—in order to parallel the following verse, "comfort me with *apples*;" for, as this last is a fruit, it should seem necessary that the former should be a fruit also. And, as these apples are a round fruit, may somewhat of the melon kind be intended, as extremely refreshing, sweet, and juicy? which seems to be the ideas included—whether an apple or a citron be the fellow-fruit referred to. As one kind of gourd is by us called *flagon*, so might anciently another kind, but of a similar genus. The word occurs here without the insertion "of wine," which is added by our translators:

lators: but in Hosea, iii. 1. is added "of grapes,"—"Loving measures—flagons of grapes:" might these be grapes gathered into gourds? or do they mean *wine*, as our translators have rendered them here, and have inserted the word *wine* in the other places—thereby fixing them to this sense? Should it rather be *rob* of grapes?

AL HENNA. LAWSONIA, WEAK, *tamra-henni*.

The leaves are dried and reduced to powder; but sand must be mixed with them to make the operation easier. This is preserved in lumps for the purposes of dyeing, and is a commodity for exportation. By means of this the nails are stained red; the hands pale yellow; the hair of old women dark yellow. Some old men, but those of the common sort only, colour their beards. Some old women make pale-yellow spots on their feet. The powder, moistened with water, is laid on the head about an hour in the bath. But in staining the hands the paste is applied over night; which being washed off, the skin is anointed with oil, that the colour may become darker. If it is to be a dark-brown, the pulp of an unripe walnut is added. *F.*

Observe, 1. The Arabic name *tamar*—"the palm henni."

2. The application of a paste to the hands over night by the women to stain their hands, and compare with this what we have said on the subject of the bride in the Canticles, on the article BAL-SAM TREES, which it may contribute to illustrate.

3. This *henna* appears to be the *copher* of the Hebrews, and the *camphire* of our translation, Cant. i. 14. For which, and for further particulars, vide FRAGMENT, No. ccccxv.

HYPERICUM, KALMII. St. John's wort. It grows on the higher region of mountains. *Ebas*. The size of a tree.

ONIONS AND SIMILAR PLANTS.

ALLIUM, *sative*, garlic. Garden-plant, *tom*.

— *cepha*, onion. Garden-plant, *basal*, *bizr basal*.

— *porrum*, leek. Garden-plant, *korrát*, *bizr korrát*.

— *of the deserts*. It grows in the desert places about Cairo. *Zaatemán*. *F.*

The Arabic name, *tom*, for garlic, is perfectly agreeable with the Hebrew name *shum*, which in Numb. xi. 5. is plural, *shummim*, and seems to imply a number of plants of much the same properties and nature. The *s* and *t* are frequently interchangeable in eastern dialects.

The sameness of the Arabic name *basál*, to the Hebrew *batjal*, Numb. xi. 5. may sufficiently justify our receiving it as the same plant. The onions in Egypt are so excellent that travellers think it no wonder that the Israelites longed for them in the desert.

HASSELQUIST says the *karrat* or leek, is surely one of those after which the Israelites repined;

for it has been cultivated in Egypt time immemorial. The favourable seasons for this plant are winter and spring. The Egyptians are extremely fond of it.

ROSEMARY is called by the present Greeks *Δειδρολίβανο*, "*plant of Lebanon*."

RUE, TUBERCULATED, RUTA.

DESCR. The *petals* are yellow, concave, and undulated. The *seed* tuberculated. The *capsula*, or pod, has five clefts, and five partitions; is tuberculated, and often contains two seeds in each partition.

It is in the deserts of *Cairo*. Arab. *mæddjen-ninæ*. The smell is strong and pleasant, like that of the garden rue. With the juice extracted from this plant, by bruising it thoroughly in water, the Egyptian women wash their heads to increase the growth of their hair, which they are fond of having long.

SENSITIVE PLANT, MIMOSA, *sejal*. In the middle region of mount *Sejal*. *Hadie*.

— *producing gum*. Dry clay plain. *Talah*. Gum distils from it, which the Arabs collect.

The inhabitants affirm that the leaves of this mimosa put into camel's new milk, prevents it from curdling and turning sour for many days.

A person afflicted with epileptic convulsions is fumigated with the wood and resin of the mimosa *orfota*. It causes at first a foetid sweat; then come forth as it were the heads of a *tænia*, which pierce the skin under the neck and in the side. They burn both heads with a hot iron, which kills the worm, and the patient recovers. This disease is called *sora*, and the worm *ork*. *F.*

For a proceeding greatly similar, in order to repel the *scolopendra* when it has partly entered a limb. Vide SCOLOPENDRA.

May this disease give any light to the complaint of Job, viii. 5. "My flesh is clothed with worms?"

SYMM ELHORAT, that is, *poison of fishes*.

This produce of Arabia Felix is carried in great abundance to the upper parts of the Red Sea, for it is very useful in fishing. The fishes are very eager after it; but on eating it they are seized with a vertigo, and being stupified, they float on the surface of the sea. *F.*

Is there any allusion to such a practice in Scripture?

SPONGIA, OF THE SHOPS. It is *tenacious*, *somewhat branching*, *inclining to a violet colour*, and has *pretty large apertures*.

It is common at Sués, and is affixed to stones. It is of a hardish substance. Also on the shores of *Alexandria*. Arab. *hösn juseph*. The women frequently use it mixed with water and the juice of a citron, as a cosmetic, to produce a ruddy colour. But it very much disfigures the skin.

THORNS.

RHAMNUS NABECA, the white THORN. The wood

wood is red and white: the fruit eatable, called *ardj*, or *redj*, *ælb*. Its leaves are food for camels, sheep, and goats.

————— *straight*. It grows on a moist clayey plain, pretty near mountains, and in the middle region of mountains. *Môr*, *Djöbla*.

————— *divaricated*. Grows on a dry clayey plain, on a moist, clayey plain, pretty near mountains, and in the lower region of mountains. *Ardj*, *Môr*, *Sidr*, *Lohaja*, *Ghasl*.—It varies: the branches are undated. *Haes*.

RHAMNUS nabeca. With the leaves dried, bruised, and mixed with warm water, the scurf is washed off from the head. Dead bodies are washed with a cold mixture of this *rhamnus*. *Môr*.

————— *divaricated*. It has leaves of half an inch breadth; stalks divaricated at each leaf; strong, and frequently double thorns.

————— *straight*. It has straight branches; either no thorns, or solitary ones at the side of the petiole, extended straight; leaves of an inch in breadth. The stem of both is like that of a tree; the fruit is a drupa, and contains a nut with two partitions; the leaves have dents, and three nerves; are smooth, ovated, obtuse; alternate, in two rows, and have petioles; the husks are setaceous. Arab. the former *sidr*, or *ghasl*, or *ælb*; the other, *ardj*, or *örredj*. *F*.

————— *zizyphus*, white thorn. A garden-plant. *Onnab*.

It can hardly be but that this tree is mentioned in Scripture, yet we find great difficulty in identifying it.

“One of the inconveniencies of the vegetable thickets of Egypt is, that it is difficult to remain in them, seeing that nine-tenths of the trees and plants are armed with inexorable thorns, which suffer only an unquiet enjoyment of the shadow which is so constantly desirable, from the precaution necessary to guard against them. *DE-NON*. Exp. pl. xxviii.

“We entered into a marshy desert full of thorny *whin*, or *rest harrow* (*ononis spinosa*).—This plant, which so strongly incommodes husbandmen in Scania, is not less common in Egypt. I have seen fields wholly covered with it. If the Egyptians were studious of cultivating their fields, they surely would destroy so pernicious a plant.—The Scripture speaks in many places of the thorn (*spina*), and nobody knows what plant it is. It is this which it means to describe; which is very abundant not only over all Egypt, but also on the borders of Asia.” *HASSELQUIST* at Cairo.—May this be the *kutj* of Gen. iii. 18. *et al.*? But the thorn which Solomon saw over-growing the field of the slothful, Prov. xxiv. 31. was *kemushun*, which is also rendered *nettles*. See Isaiah xxxiv. 13. Hosea ix. 6. where it seems evidently to be distinguished from *thorns*.

THIRD DIVISION—TREES.

ACACIA, MIMOSA. It is carried from Upper Egypt to Sués, and is the principal wood made use of for building ships. The *pine tree* is brought from the Archipelago to Alexandria, and from thence to Cairo and Sués. The keel of the ship is laid with *sadj* wood, brought from India. It is expensive, but strong, and never decays. *F*.

If wood for building ships is now brought from such distant places, then Solomon, or any other king of Judea, might equally convey it to his ports on the Red Sea. Vide *FRAGMENT*, No. cxxv.

If this tree yield wood for ship-building, it might well yield wood proper for the construction of the holy ark, tables, &c. Being an Egyptian wood, there could be no want of it in the camp of Israel.

The bringing of wood for ships from India is remarkable.

ALMOND TREE, called *louz*, or *lauz*, is cultivated in gardens. *F*.

The name is the same as the Hebrew *luz*, and no doubt the tree is the same.

“The new flowers of the year were the renunculous *ficaria*, of which there was an infinite variety, without reckoning the *almond tree*, which was white as snow (with blossoms.) Why does

the almond tree expand its flowers before its leaves? Is it not, perhaps, because its fruit being a hard nut it requires longer time to grow in? This tree is the ornament of the hill; and accordingly it cannot fail of producing quantities of fruit, since it blossoms in a season when the weather is constantly serene, and it is not exposed to the rain, or to bad weather. *HASSELQUIST*, at Smyrna, Feb. 14.

APPLE TREE, is extremely rare. Is named *tyffahh*. *F*.

With every disposition to render the *taphuach* of the Hebrews by the *citron*, as now is generally done, we must acknowledge that this testimony of *M. FORSKALL* is a very great impediment. The name undoubtedly is the same; and it is a name remarkable in its formation. *Celsus* thought that the apples of Scripture were *quinces*, which he shews from ancient authors were golden in colour, delicious in taste, fragrant in smell, and refreshing beyond our quinces in England. I fear, too, that the names of the citron trees are exotic, and betray their foreign origin (vide *CITRON*.) Nevertheless, the apple-tree is *extremely rare*: yet in Joel, i. 12. it is enumerated among the valuable, but not uncommon, garden trees, the vine, the fig, the pomegranate, the palm:—does the citron

citron or the apple best coincide with these companions? or must we adopt the quince? If we depend on M. FORSKALL we must revert again to the apple: perhaps this was cultivated by Solomon with peculiar care; and, as it grows with difficulty in hot countries, he might bestow even assiduous attention on it. It is now, after many efforts, raised in Bengal. Does its shadow, fragrance, refreshment, glowing colour, exceed those of the citron? or what species of it may best agree with these particulars?

ASH. This word occurs Isaiah xlv. 14. The lxx. and Vulgate think it is the *pine*. As, however, it seems to denote a tree *shaking* as by the wind, a *vibrating* tree, perhaps we might look to some of those poplars which now are so common among us; or some of the larches, which tremulate, and whose leaves also shiver with the slightest agitation of the air. As this wood is intended to form a statue, so I think I recollect that the *larix* furnished wood for small figures among the carvers of antiquity.

BALSAM TREES.

AMYRIS, OPOBALSAMUM, *abu schâm*; that is, *very sweet scented* (father of scent). It is a middle sized tree, the branches widely spreading.

AMYRIS, KAFAL.

OBS. The *leaves* are ternated; the folioles sessile, and serrated at the apex; the lateral ones are less, oval, and oblique; the middle one is larger, of an inch breadth, inversely oval, narrowed at the base. The *seed* of the berry is inclosed in a case of a bony substance, almost as hard as a nut; the fruit a drupa, or olive; the *berry*, supported at the base by a calyx four times dentated, having the side marked with four longitudinal lines. This plant yields a most fragrant smell of balm. The pulp of the green berry, on being wounded, distils a white balm.

The wood *kafal* constitutes a great part of commerce; and is brought to Egypt, where earthen vessels for carrying water are impregnated with the smoke of it, in order to contract a flavour of which this nation is very fond. The gum of this tree is a purging medicine.

There are two other trees only known to me by name, as the *Schadjeret el murr*; that is, *tree of myrrh*; the other, *Chadasch*, which resemble those already described, if we may rely on my informers. F.

AMYRIS, KATAF, which closely resembles the *kafal*, is said by the Arabs in the rainy month (called *Charif*) to swell, and at a proper time to shed a red sweet-smelling powder, which the women of the country (*Abu Arisch*), where it is found in great plenty, sprinkle on their heads, or which they use to wash themselves with.

The fruit of the *el-caja*, which grows in the mountains of Yemen, whose flowers resemble those

of the *citron*, is mixed with those fragrant essences with which the Arabian women wash their heads. F.

Nothing is more inexplicable to us than the remark of the bride, Cant. v. 5. who, rising from bed, says, "her hands dropped myrrh (balsam), and her fingers sweet-smelling myrrh, on the handles of the lock." But I think this extract may assist our conjectures on the subject. Observe, 1. The word rendered *sweet-smelling* signifies self-flowing—dropping—what comes over (as a chemist would say) freely. Now, as we are not bound, that I know of, to restrain this to a juice, we may take it for this very "*red, sweet-smelling powder, shed spontaneously by the tree itself.*" Moreover, as the women of *Abu Arisch* cannot possibly use a powder, simply, to wash themselves with, but must combine it with water, or fluid, or essence of some kind, we shall, I apprehend, need only to admit, that with such an essence, which the bride calls *balsam*, she had recently washed herself, (*i. e.* before going to repose) to perceive that this incident, so perplexing to us, because unlike our customs, is perfectly agreeable to the customs of Eastern countries, and what in Arabia would be thought nothing extraordinary. If the bride had only washed her head with such an essence, yet some of it might remain on her hands; but if she had, which nothing forbids, washed her arms and hands also (*vide Al HENNA*), then it might naturally occur to a person, fancying herself in a dream to be acting, that she should suppose her hands and fingers to shed some of this fluid, wherever, and on whatever, they touched. It appears that fragrant essences of several kinds are used by the women in Arabia; of which professor FORSKALL affords sufficient instances.

As the Opobalsam grows in Arabia, I see no reason why it may not be the famous *balm* of Judea, mentioned Gen. xxxvii. 25. xlii. 2. and Jer. xlv. 11. *et al.* the *Tzeri*. There being several other *balmy* trees, perhaps may have been the reason why this has any difficulty in it, since certainly we must admit the possibility of its being one of them.

BÆCKA, an obscure tree; venomous. Its berries destructive to sheep.

BÆCKA, or *ebka*. Djobla.

This tree has *leaves* rather ovated, smooth, entire; produces milk, and is poisonous.

BEHEN, or BEN, a kind of nut: from this is extracted an oil, which having neither taste nor smell, is extremely proper for composing unguents and odoriferous balsams. For this reason the Orientals infuse in it jasmine flowers, narcissus, &c. and make a perfumed oil of it, with which those who love perfumes anoint the head, the face, and the beard. It is without doubt the same as Aaron was anointed with, and which David valued so highly." HASSELIQUIST.—[Comp. Lev. viii.

12. Psalm cxxxiii. 2.; also Psalm xxiii. 5. cxli. 5. 9.; comp. also, Psalm civ. 15.]

The tree grows on Mount Sinai, and in Upper Egypt. The Arabs call it *festuck* and *ban*. May this be the *necuth* of Gen. xxxvii. 25? Having more than one Arabic name, I partly suspect it.

BOX.

CAROB, CERATONIA SILIQUA, Arab, *charúb*, which *Alpinus* and the shops called *sweet pod*, is not *diacia*, as LINNÆUS describes the *ceratonia*, but hermaphrodite, having six stamina and one pistil; it has seldom seven stamina. I once saw it in flower at Alexandria. F.

Fisher says, Travels in Spain, p. 352. Eng. Edit. he saw "men knocking down the *carob* fruit with long perches. These carobs (or *algaras*) are long black husks, containing a brown sweetish pulp, with which mules and cattle are fed. They are extremely nourishing; and it is said they give the mules more strength to bear fatigue."

CAMPHIRE. Vide *Al HENNA*.

CASSIA.

CEDAR.

CITRONS. TURUNDJ BAELEDI. *It has elliptical, oblong, serrated, and rather obtuse leaves; alated only at the beginning.*

TURUNDJ M'SABBA; *has leaves like the former, only shorter, and a more agreeable fruit.*

OBS. I chose to enumerate so many species or varieties (eleven), that I might not incur the displeasure of gardeners. They are grown, principally, in the gardens of Cairo. I saw at *Rosetta* a garden rendered most delightful by the citron trees: but I observed the ground was bare and destitute of grass; doubtless these plants emit very strong and penetrating exhalations.

The fruit (*pomerants*) of the *narendj citron tree*, still unripe, and no larger than a nut, is cut into two parts, which are hung up by a thread, and dried; they are afterwards thrown into oil, and exposed to the heat of the sun for forty days: this becomes a cosmetic, very acceptable to the women, with which they dye white, and even hoary hair of a black colour; and, unless wrinkles on the face prevent, they procrastinate a little the marks of old age. F.

For some observations which might be made here, vide APPLE.

CYPRESS.

ELM.

FIG-TREE, FICUS, *Sycamorus*. Mulberry fig-tree. It grows on a moist clayey plain, pretty near mountains, and in the middle region of mountains. *Chanas, öbre, sokum.*

———— FICUS, *sycamoroides*, yielding sycamores. Name the same as the former. *Uadi, Surdúd.*

———— *carica*, *lenten*, or dry fig. Cultivated in plains. *Tin.*

———— *mulberry leaved*. Lower and

higher regions of mountains. *Balis, Hadie, Kurma.*

DESCR. The leaves are longer than the petiole, half a span, cordated, oval, pointed, serrate, rough on both sides, alternate; two *stipulæ*, membranaceous, linear, lanceolated, erect. The fruit is eatable, but unpleasant.

There are many other kinds of fig-trees.

———— FICUS SYCAMORE, TRUE; true Sycamore fig-tree. *It has leaves widely ovated, bowed, or angulated; rather obtuse, smooth, cordated at the base.* Arab. *djummeiz*.

This tree abounds the most of any in Egypt: it is planted on the banks, and along the ways near their villages; and branches out to such a distance, that a full-grown tree furnishes a shade for a circle of forty paces in diameter; therefore a row of trees on only one side of the way is sufficient.

The fruit does not grow from the branches; but shoots bearing fruit, and close together, sprout from the trunk itself, or from the wood of the largest branches. The inhabitants told me that the fruit came to maturity several times in a year, as often as seven times. I give credit to HASSELQUIST, a botanist and an eye-witness, who affirms, that can only be in the month of June; for this is to be understood of those figs that are eatable, and have the true seeds.

The sycamore figs are called by the Egyptians *djummeiz bædri*, that is, *præcocious sycamores*, because the others are not ripe before the overflowing of the Nile, whereas these are ripe about the end of the month of April. They are mellow, turning yellow, juicy, sweet; not fecundated or pierced by worms: the buds, however, are large and fleshy. The male flowers are clothed to the centre point, which has a small aperture in the middle; and round the outside of that is marked a wide shining ring. This ring is not the work of the cynips, as HASSELQUIST thought, but is an impression of art; for when the fruit is arrived to the size of an inch diameter, the inhabitants pare off a part at the center point, which place then turns black. They say that without this paring it would not come to maturity. They have knives formed expressly for this work, made round at the point, and only sharp on one side. If any figs are passed by and not cut, they become full of the cynips [insect] about the time of the overflowing of the Nile. However that be, I saw no seeds in those figs ripened by art.

In Arabia the fig-tree and the Indian tamarind are planted to form shades all over the houses. F.

The reader will recollect the prophecy of Zechariah, iii. 10. "Ye shall call every man his neighbour under his vine (vide VINE), and under his fig-tree." Comp. 1 Kings iv. 25. Mich. iv. 4.

This extract furnishes much information connected with Scripture: as, 1. That the mulberry-leaved

leaved fig-tree is planted along the sides of the roads. Compare the instance of the barren fig-tree cursed by our Lord, which stood by the road side, Matth. xxi. 19. Mark xi. 13. 2. That the fruit comes to maturity several times in a year—so often as seven times. N. B. That this can hardly be restricted to one month, is clear, because seven times is too often for that space of time: but, as M. FORSKALL refers this to those which are eatable, and *have seeds*, both opinions may be reconciled, by saying, figs not prolific are produced in other seasons of the year. 3. That *precocious*, or early, figs are produced in the month of April; either, then, these are different from those referred to the month of June *only*, as we have supposed; or this testimony invalidates the former. The barren fig-tree of the Evangelists, having leaves, was expected to produce, at least, figs of this inferior kind. 4. This seeming contradiction in M. FORSKALL is exactly similar to that of Mark, who says, March or April “was not a time for figs:” yet Jesus came seeking figs;—so M. FORSKALL says “figs are ripe about the end of April,” yet “they come to maturity *only* in the month of June.” I notice this, because it shews that a contradiction so glaring is no contradiction at all: proper restriction regulates it to certainty. 5. The forming by art of a white shining ring on the fruit, which is done to cause it to ripen, explains the character that the prophet Amos attributes to himself, chap. vii. 14. “I was a *scraper*, or cutter, or parer, of sycamore fruit,” to forward its maturity. This custom is clear, and full to the passage. 6. Those thus cut for ripening have no seeds. One would suppose, too, that they have little hold on the parent tree. So Nahum speaks of “fig-trees with the first ripe figs, which, if they be shaken, shall fall” easily. This disposition of the fig-tree to part with her *untimely* figs, *precocious*, as M. FORSKALL calls them, is noticed, Rev. vi. 13. Vide Isaiah xxxiv. 4. Hosea ix. 10. “I saw your fathers as the first ripe in the fig-tree at her first time.” The time of the fig-tree putting forth her figs is a sign of spring, Cant. ii. 13.

The Hebrew name, *taan*, agrees with the Arabic name, *tin*, for one kind of fig-tree; *sokam*, *sycamin*, or sycamore, is another kind. I suppose this distinction to be correctly maintained in the Hebrew Scriptures.

At *Devoult* in the Delta, in the interior part of the palace, was a court, wherein grew a sycamore. “The shade of a sycamore must always be reckoned, in Egypt, as a summer apartment, or lodging for the servants of a party.” DENON, Exp. pl. xvi.

Under the sycamore.—“Great use is made of the shadow of the sycamore in this hot climate.” DENON, Exp. pl. xxii.

“An Arab council held under the sycamore,

the most advantageous shelter of the place.” DENON, Exp. pl. lxxiv.

FIR-TREE. The EXPOSITORY INDEX on 2 Sam. vi. 5. has hinted a doubt whether *fir-wood* was intended by *beroshim*, rather than a musical instrument. On this article it is but fair to insert the following note from Dr. BURNEY'S History of Music, vol. i. p. 227.:

“FIR, this species of wood, so soft in its nature, and sonorous in its effects, seems to have been preferred by the ancients, as well as the moderns, to every other kind, for the construction of musical instruments, particularly the bellies of them, on which their tone chiefly depends. Those of the harp, lute, guitar, harpsichord, and violin, in present use, are constantly made of *fir wood*.”

KEURA, ODORIFEROUS.

It is propagated at *Hadie* from the stocks, as they have no female tree: it was brought from foreign parts, no doubt by the Banjans, by whom it is pronounced *keura*; by the people of *Hadie kadi*, (which, however, is a general name for different kinds of trees.) At *Mockha* it is called *ka-bua kadi*. It is very often brought from *Machrasch*, a place to the east of the city of *Zebib*.

It is a very excellent tree, and cultivated on account of its smell, which it sends forth so rich, that one or two *spikes* are sufficient to perfume a spacious chamber for a long time, if they are kept in a dampish place; and therefore, the inhabitants do not take the trouble to plant them in pots and bring them into their houses, or to cultivate them in little gardens. At *Beit-el-jakih*, a spike having flowers is sold at the rate of 8 *chomase*, that is, $\frac{1}{5}$ of an imperial of Hungary.

In form it resembles the palm; but without *spatha* (long leaves;) the boughs dichotomised; it has small white flowers, among which towards the ends of the branches, imbricated at the base, are male panicles, or catkins (*amenta*), branchy, naked, and extremely fragrant. F.

I have inserted this tree, because it appears to be some such extremely odoriferous tree, to which the bridegroom compares his bride, Cant. vii. 7. “Thy stature is *tall, strait, erect*, like to a palm-tree; and thy breasts to clusters—thy breasts shall be *fragrant* as clusters of the vine, and the smell of thy breath like apples.” The *flowers* of the (male) palm are odorous, but its fruit I believe is not: may not some more strongly-scented shrub be intended, since the comparison refers to perfumes? and is not the palm-tree (60, 80, 100 feet high) *rather* too tall for the simile here used? The word *tamar* (the palm) signifies any thing *tall*:—a heap, Jer. xxxi. 21. and pillars of perfumes, Cant. iii. 6. This is submitted as conjecture merely.

LIGN-ALOES. From what we have said on the aloes-plant, it is clear, that cannot be the “*Ahalim* which Jehovah had planted,” Numb. xxiv. 6. which our translation renders “*lign aloes*.”

—As we have thought that this expression, with others referring to the garden of God, Ezek. xxviii. 13. xxxi. 8, 9. and to the cedars of the snowy mountain, Psalm civ. 16.; Ezek. xxxi. 3. alludes to the original situation of Paradise, we must ascertain that situation, and the trees which flourish around it, before we can determine this article. M. FORSKALL was told it was the *SANTAL-tree* of India.

MULBERRY-TREE.

MORUS, *black.* } Gardens of Constantinople.
 —, *white.* } They are cultivated for their fruit; as they make no account of silk-worms here.

Both trees have their leaves cordated; but the *black* has smaller and yellow leaves; the *white* larger, and dark-green. Scions are ingrafted, whence the fruit becomes milder; but that of the *black* mulberry-tree, sharper. Bees resort in swarms to the blossoms of the *white* mulberry-tree.

MORUS, *wild.* Its fruit has little juice, but yields a greater quantity of seeds: on the contrary, the *cultivated mulberry-tree* furnishes a much more juicy fruit, and fewer seeds. *F.*

Whether the mulberry-tree is mentioned in Scripture has been doubted: the *becaim* of 2 Sam. v. 23. hardly justifies it.

MYRRH. Vide BALSAM-TREES.

Arab. *mur.* It is brought from Arabia. *Bedellium* is the name of an imperfect myrrh.

NUTS. Vide WALLNUTS.

OLIVE-TREE, cultivated every where; grows naturally throughout the Archipelago.

PALM, DATE-BEARING. The palm-tree is an object of considerable attention in the gardens of Egypt. The trees are planted in spaces 8 yards distant. They bear fruit the sixth year. When young, they are covered with mats, in order that the leaves may coalesce with the trunk. Every year *two strata* of branches round the trees are cut off; by this their *age* is easily computed. The *sex* of the younger palm-tree before it has flowers is known by the *lateral leaves*, which in the *female* are triangular to the base of the leaf, the pipe reaching up as far as the base; but not to the apex.

PINE. Isaiah xli. 19. lx. 13. a tree of Lebanon. We want further information on this tree.

POPLAR. The *white* poplar is mentioned Gen. xxx. 37. Hosea iv. 13.

PLATANUS, or PLANE-tree. "Twenty-eight feet is the measure of the circumference of a *platanus*, growing at Stanchio. This tree has forty-seven branches, each of a fathom in thickness; they are supported by pillars of stone, and cover a terrace, and about a score of houses. I fancied, in beholding it, that I was surveying the most extensive, the most ancient, and the most remarkable tree which the vegetable kingdom has produced." *Hasselquist*, Letter xviii. May, 1750.

The reader will see how fit this tree, the *Platane* is, by its extent and its shadow, for meet-

ings, conferences, &c. beneath it, as suggested, EXPOS. IND.

ROSE-TREE.

Gardens of Constantinople. *Βαμιά*; called by the Turks *awmi seriul*.

It has a double white flower. The *folioles* lanceolated and sharp. It rises to the height of the houses.

— *ephemerum*, or, *day-rose*. Gardens of Constantinople. Called by the Turks *sybadjal*: the same by the Greeks. Its *folioles* are somewhat ovated and obtuse. It has flowers once every year: the flower being expanded, becomes red before noon; in the afternoon it is pale, the next day white.

SYCAMORE. Vide FIG-TREE.

TAMARIX, ORIENTAL. The branches and shoots are articulated, the sheaths of the branches cylindrical, having one point formed in scales; the longest shoots are bare and articulated, having cylindrical sheaths, and one point at the joints.

OBS. The flower has five and even six stamina, three pistils.

It differs from the *French tamarisk*; the branches of which are scaled, having alternate, sessile, lanceolated scales; the shoots are short and imbricated; it has *folioles* lanceolated, and close together. Arab. *atl*; Hebrew *שזן*. ALPINUS has lately delineated the tree, not, however, very accurately.

The galls of the tamarisk are used in the shops instead of the fruit. A peculiar horned CICADA (cricket) resides in this tree.

TAMARISK, the wood is employed to make nails.

TEIL.

TEREBINTHUS, PISTACIA. It has leaves unequally pinnated, and somewhat ovated.

OBS. The *folioles* are ovated, lanceolated, running down. It is called by the Europeans *terebinth*, but I saw no flowers. It is planted along the ways, and in gardens every where in *Natolia*: Greek, *Σχινος*.

VINE, wine-bearing. *Borghas fountain*,—*Γρηβίζελα*.

It grows spontaneously, is full of branches, and runs up the highest trees, twisting round them in a wonderful manner, and following them with its branches. Its fruit is oval-globose.

WALNUT. Supposed to be the *nuts* of Canticles vi. 11.

WILLOW, SALIX, of *Babylon*. Gardens of Constantinople. It has its boughs hanging down.

— *frail*. *Ibid.* Its boughs are erect.

— *white*. *Ibid.* *Γάργα*.

The leaves above are not very rough, underneath they are whitish.

— *smooth*. At the Dardanelles. The leaves serrated-lanceolated, and smooth.

The willow is called *rân* and *chaláf*.

AQUATICS.

AQUATICS.

FIRST DIVISION—INSECTS.

1. Apparently without Wings.

ANTS.

ANT, of Solomon. Like to our common ants, but larger. It makes burrows under the earth. Not infrequent at Alexandria.

——— *the devourer*.

Is among the smallest.

Its body hairy.

Camphor expels them.

——— *malignant, káamús*. Is venomous; the pain it occasions is like the bite of a scorpion; which is removed by washing it with the recent juice of the *basilicus*. *F.* Vide on Ezekiel ii. 6. and Hosea iv. 16. *EXP. IND.*

——— *the red, káas*. Less than the former. Inhabits wood; is in reputation among the husbandmen for the useful hatred with which it pursues the *dharr*, ant, which greatly infests the date-trees. To this labour, the price of *heml*, a heap—a pile—(*acervatim*) (a camel's load) further conduces; which is worth an imperial.

——— *the black*, maintains a continual war with the red; but is inferior in strength. *F.*

I cannot let this article pass without observing the phraseology used in it; "a pile (*acervatim*) is worth an imperial:"—this *pile* is called *heml*: but, we should not have known what this *heml* might be, or its application to the subject, had it not been explained in a parenthesis, as "a camel's load"—I infer, that the manner of calculating quantities by *heaps*, is yet extant in the East; and therefore, that what we have said on this subject, in *EXP. IND.* on Samson and Abigail, &c. 2 Kings vi. 25. is not undeserving notice. If small subjects, such as ants, frogs, figs, &c. were heaped in piles, then we may understand Samson as saying that he beat his enemies into such small particles: otherwise, that his enemies were beaten in so great numbers, that they lay heaped on one another in piles: this agrees with the *piles* of frogs in Egypt; (and with the *pile* of ants before us) and it shews, at least, the *possibility* that the "ass's head" of our translation, was a *pile*, of such small seed as *chich-peas*, or tares, &c. Moreover, if we may venture to take the Hebrew word for *pile*, [ass—q. *ass-LOAD*] as analogous in quantity to the Arabic *heml*, 'camel's load,' we may estimate its contents accordingly; and this, in all probability, was not so much what an ass *could* carry, as an extraordinary burden, but a determinate quantity: for, as our own expression of an *ass-load*, or a *horse-load*, does not imply the whole weight which either of those animals *can* carry, but a fit load

for a horse, or an ass,—*i. e.* somewhat more than is proper to be carried by a man; so, perhaps, the *pile* or *heap* might not exceed two or three bushels; and possibly, in the instance of Abigail, it was not so much; as the word is plural there.

FLEA, needs no description or enlargement.

PALMER. Vide *EXP. IND.* on Joel.

SCOLOPENDRA, ADHERING. *Om arba um arbajn* [*um urba wa urbain. R.*] a span in length; brown. At Cairo, plentiful in the great heats of summer. Its bite is rarely fatal, but very burning, little less than that of the scorpion. It will penetrate the whole of the flesh of the feet, if not extracted.

Therefore a hot iron is used to touch lightly the head of the *scolopendra*, which rises a little; and this is continued all along its members, by which it is gradually repulsed. *F.*

Vide *EXPOS. IND.* on Ezekiel, ii. 6. **ANT**, *malignant*; and **GAD-FLY**, in this arrangement.

SCORPION, *akrab. R.*

The same evidently as the Hebrew *okrab*, or *akrab*.

SPIDER, called in Arabic *ankaboot. R.*

SPIDERS: *sector*: on Mount Melhan, in Yemen.

——— *citricola*; among the orange-trees at Cairo. Spreads its web horizontally.

——— *rivulata*: is among the smallest in size; spreads its web horizontally, without the usual courses: is frequent in the houses in Cairo.

——— *insidiatrix*: answers pretty much to our field spider.

——— *three-banded*: taken in the garden of Cairo, in December: spreads its web vertically.

2. Apparently with Wings.

BEETLE.

——— golden. *Djæall*.

——— blackish. Vide **CANKER-WORM**.

BLATTA, the **COCK-ROACH**.

——— Egyptian. *Sursur*. Domestic at Alexandria.

——— Oriental. Same place, large: seen in houses. Vide **CATERPILLAR**.

CANKER-WORM, or rather **BEETLE**. As the Philosophical Transactions are seldom to be met with *complete*, and the early volumes are very rare, we shall extract what may elucidate this insect, from Vol. xix. No. ccxxxiv. page 742. &c. The reader will judge of its application. Dr. *Molyneux* writes, from Ireland—

"The first time great numbers of these insects were taken notice of in this kingdom, I find was in the year 1688. They appeared on the south-

west coast of the county of Gallway, brought thither by a south-west wind, one of the common, I might almost say, trade-winds of this country, it blows, so much more from this quarter in Ireland, than from all the rest of the compass.

"From hence they made their way into the more inland parts towards Heddford, a place belonging to Sir George St. George, baronet, about twelve miles north from the town of Gallway; here and in the adjacent country, multitudes of them shewed themselves among the trees and hedges in the day-time, hanging by the boughs, thousands together, in clusters, sticking to the back one of another, as is the manner of bees when they swarm. In this posture, or lying still, and covert under the leaves of the trees, or clinging to the branches, they continued quiet, with little or no motion during the heat of the sun, but towards evening or sun-set, they would all rise, disperse, and fly about, with a strange humming noise, much like the beating of drums at some distance, and in such vast incredible numbers, that they darkened the air for the space of two or three miles square.

"Those that were travelling on the roads, or abroad in the fields, found it very uneasy to make their way through them, they would so beat and knock themselves against their faces in their flight, and with such a force, as to smart the place where they hit, and leave a slight mark behind them.

"This, though it was no little trouble, especially to children, and those that were more nice and timorous of the female sex; yet, it was not the only inconvenience they brought along with them; for, a short while after their coming, they had so entirely eat up and destroyed all the leaves of the trees for some miles round about, that the whole country, though it was in the middle of summer, was left as bare and naked as if it had been in the depth of winter, making a most unseemly and indeed frightful appearance: and the noise they made whilst they were seizing and devouring this, their prey, was as surprising; for the grinding of the leaves in the mouths of this vast multitude all together, made a sound very much resembling the sawing of timber.

"Nor were the trees abroad, and hedges in the field the only sufferers by this vermin, they came also into the gardens, and destroyed the buds, blossoms, and leaves of all the fruit trees, that they were left perfectly naked; nay, many of them that were more delicate and tender than the rest, lost their sap as well as leaves, and quite withered away, so that they never recovered it again, particularly several trees in the curious plantation of one Mr. Martin.

"Nay, their multitudes spread so exceedingly, that they disturbed men even within their dwellings; for out of the gardens they got into the houses; where numbers of them crawling about were very irksome, and they would often drop on

the meat as it was dressing in the kitchen, and frequently fall from the ceiling of the rooms into the dishes as they stood on the table while they eat, so extremely offensive and loathsome were they, as well as prejudicial and destructive.

"Nor did the mischievous effects of this pernicious vermin stop here; their numerous creeping spawn, which they had lodged under-ground next the upper sod of the earth, did more harm in that close retirement, than all the flying swarms of their parents had done abroad; for this young destructive brood, did not withhold from what was much more necessary to have been spared, and what their sires had left untouched: these lying under ground, fell a devouring the roots of the corn and grass, and eating them up, ruined both the support of man and beast; for these losing their roots, soon withered and came to nought, to the vast damage of the country.

"This spawn, when first it gave sign of life, appeared like a large maggot, and by taking food and increasing every day, became a bigger worm, till at length it grew as big as a great white caterpillar: from whence, according to the usual transformation natural to these smaller animals, came forth this, our flying insect; but how, or to what certain periods of time, these metamorphoses and changes were wrought, I could not meet with any one able to inform me.

"This I thought remarkable, that these young and tender worms should live on a coarser diet, and fare more hardly than their strong and older parents, whose food was the fine soft substance of leaves and blossoms, whilst these fed upon the tough and almost ligneous fibres of the roots of plants. But I find Dr. Lister has observed the like difference between the diet of common caterpillars and their butterflies; those eating the grosser food of leaves, whilst these live only on the pure refined meal, and most spirituous juice of flowers: and this seems one of the wise contrivances of nature, that adapts as most proper the airy finer nourishment, for the more agile and light body of the volatile insect, while the same animal, when a dull reptile worm, is sustained by a more gross and terrene food, more fitting to its slow and heavy nature.

"But notwithstanding this plague of vermin did thus mightily prevail and infest the country, yet it would have been still much more violent, had not its rage been fortunately checked several ways.

"High winds, wet and misting weather, were extremely disagreeable to the nature of this insect; and so prejudicial as to destroy many millions of them in one day's time: whence I gather, that though we have them in these northern moist climates, they are more natural, and more peculiarly belonging to warm and dry countries. Whenever these ill constitutions of the air prevailed, their bodies were so enfeebled, they would let go their

their holds, and drop to the ground from the branches where they stuck, and so little a fall as this, at that time, was of sufficient force quite to disable, and sometimes perfectly kill them. Nay, it was observable, that even when they were most agile and vigorous, a slight blow or offence would for some time hinder their motion, if not deprive them of life, which was very extraordinary in a creature of that strength and vivacity in its flight.

"During these unfavourable seasons of weather, the swine and poultry of the country at length grew so cunning, as to watch under the trees for their falling; and when they came to the ground eat them up in abundance, being much pleased with the food, and thriving well upon the diet; nay, I have been assured, that the poorer sort of the native Irish (the country then labouring under a scarcity of provision) had a way of dressing them, and lived upon them as food; nor is it strange, that what fattened our domestic poultry and hogs, should afford agreeable and sufficient nourishment for the relief of man.

"In a little time it was found that smook was another thing that was very offensive to these flies.

"But towards the latter end of the summer, the exact time I have not learnt, they constantly eased the country, and retired of themselves; and so wholly disappeared, that in a few days you should not see one left in all those parts that were so lately pestered with them.

"I am certainly informed by several good hands, that in the spring time, by accidental digging or plowing up the ground, great hollows, or nests of them are frequently discovered and broken up, where they find whole bushels together in one heap, but in such a quiet condition they seem to have but little life and motion.

"The true locust, much resembling in shape a common grasshopper, though larger, is quite a different sort of insect from this, which belongs to that tribe, called by the naturalists *koleopteros*, or *viginipennis*, the *scarabeus*, or beetle kind, that has strong thick cases to defend and cover their tender thin wings, that lie out of sight, and next the body.

"This species is certainly that particular beetle, called by *Aristotle* in his *History of Animals*, *melolanthé*, from its devouring the blossoms of apple-trees, see *Aldrovandus de Insectis*, lib. iv. page 448. and is the *Scarabeus arboreus* of *Moufet* and *Charleton*, called by the English, dorrs or hedge-chafers, and by the French, *les hannetons*.

"They are much of the bigness of the common black-beetle, but of a brownish colour, something near that of cinnamon; they are thickly bespersed with a fine short downy hair, that shews as if they were powdered all over with a fine sort of dust: the cases of their wings do not entirely cover all the back, for their long peaked tails, where lie the organs for generation, reach a good way beyond

them; the indentures, or joints of each side their belly, appear much whiter than the rest. Vide the *Scarabeorum Tabulæ Mutæ* of *Dr. Lister*, who has neatly expressed it.

"This pernicious insect of ours, I am fully convinced, my lord, from good reasons, is, that self-same (so often mentioned in holy Scripture, and commonly joined in company with the locust, as being both great destroyers of the fruits of the earth) to which the *Septuagint* and the *Vulgar Latin* translation, retaining the Greek word, give the name of *bruchos* or *bruchus*, derived from *bruchos*, *frendo*, vel *strideo*, intimating the remarkable noise it makes both in its eating and flying, from whence, likewise it has got its *French* name, *hanneton*, (as the judicious *Furettiere* in his copious *French Dictionary* tell us) by corruption from *aliton*, quasi, *alistonans*—"thundering wings."

"I meet with this sort of fly spoken of in the Bible, *Leviticus* xi. 22. *Joel* i. 4. and ii. 25. and *Nahum* iii. 16, 17. and it may occur, for aught I know, in several other places; but I find our English version almost constantly translates this word *bruchos*, though improperly, as I think, "canker-worm," since this denotes only a *reptile*, or creeping vermin, whereas that word imports certainly a *flying insect*. For the *bruchos* in chap. iii. 16, 17, of the prophet *Nahum* is expressly said to fly, and have wings, and its nature and properties are most truly and particularly described in these words: *it spoileth and fleeth away, they camp in the hedges in the day, and when the sun ariseth they flee away, and their place is not known where they are*: that is, they then retire again to the hedges and trees where they lay quiet and concealed, till the sun sets again.

"If this passage be compared with what I have said above of our Irish *bruchos*, we must allow *Nahum* played the natural philosopher here, in this short, but accurate description, as well as the divine prophet, in denouncing God's judgments.

"In one of the forementioned texts, I find, indeed, the word *bruchos*, more rightly translated locust or beetle in our English Bibles; and this place on another account seems so apposite and agreeable to something I said before, I cannot avoid taking particular notice of it to your lordship, and on this occasion give you my thoughts more fully concerning the *rationale* of that odd clause in the *Jewish law*, where *Moses* tells the *Israelites*, *Leviticus* xi. 21, 22. *That these may ye eat, of every flying creeping thing that goeth on all four, which have legs above their feet, to leap withal upon the earth; even these of them ye may eat; the locust after his kind, and the bald locust after his kind, and the grasshopper after his kind.*

"Now I must confess, notwithstanding all that the learned commentators have said on this passage, it hitherto has seemed to me, (and I believe to

to most readers) very strange and unaccountable, that here, among the pure, wholesome creatures, proper for human nourishment, beetles, and those other nasty, dry, unpromising vermin, should be thought fit to be reckoned up as *clean* and proper for the food of man.

"But since I have had some little experience of what has happened among ourselves, I cannot but admire the Providence of God, and the sagacious prudence of his law-giver, *Moses*, who foreseeing the great dearth and scarcity that these vermin might one day bring upon his people, had a particular regard to it, and therefore gives them here a permissive precept, or a sort of hint what they should do when the *corn, grass, olive-trees, fruit-trees, vines*, and other provisions, were destroyed by the locust and *bruchos*, or beetle, swarming in the land; why then for want of other nourishment, and rather than starve, he tells them they might eat, and live upon the filthy destroyers themselves, and yet be clean.

"And thus we see the native Irish were (though unknown to themselves) authors of a practical commentary on this part of the Levitical law, and by matter of fact, have explained what was the sense and meaning of this otherwise so dark and abstruse text."

CATERPILLAR, if the foregoing subject, the *chafer*, be the *bruchus* of the lxx. and the *IALEK* of Joel i. 4, then our conjecture that the *chasul* of the same passage is the *cock-roach*, seems the more plausible, as this creature may follow the former with great propriety. The following is extracted from BARBUT, page 101.:

"The cock-roach is one of those domestic insects well known in kitchens and bake-houses. It is broad, flat, and smooth. This insect, rather ugly to the sight, runs pretty quick; some species also fly, but it can only be said of the male, for the female is unable so to do, as it has only very short stumps of wings, which can be of no use to it. The larva of the cock-roach differs little from the perfect insect, but by the total want of wings and elytra, being otherwise perfectly like it. This larva feeds on meal, of which it is very voracious. Where that is wanting, as in the fields, it gnaws the roots of plants. Of the same genus is the famous *Hakkerlac* of the American Isles, that so greedily devours the provisions of the inhabitants. That insect, as well as our cock-roach, shuns the day-light; and all those insects keep concealed in holes, which they only leave in the night."

FLIES, *duban*. R.

——— gad-fly.

——— zimb.

The gad-fly is a remarkable insect among ourselves; and as we have hinted at its application to a passage in Ezekiel, we cannot do better than quote an account of it from the "Transactions of the Linnæan Society," Vol. iii. page 295. We

may suppose all the oriental species to be at least equal to our own in powers. The writer, Mr. CLARK, says, "the *æstrus bovis*, or beeve gad-fly, is rarely seen or taken, as the attempt would be attended with considerable danger. The pain it inflicts in depositing its eggs is much more severe than any of the other species. When one of the cattle is attacked by this fly, it is easily known, by the extreme terror and agitation of the whole herd: the unfortunate object of the attack runs bellowing from among them to some distant part of the heath, or to the nearest water, while the tail, from the severity of the pain, is held with a tremulous motion strait from the body, in the direction of the spine, and the head and neck are also stretched out to the utmost. The rest, from fear, generally follow to the water, or disperse to different parts of the field.

And such is the dread and apprehension in the cattle of this fly, that I have seen one of them meet the herd when almost driven home, and turn them back, regardless of the stones, sticks, and noise of their drivers; nor could they be stopped till they had reached their accustomed retreat in the water.

When the oxen are yoked to the plough, the attack is attended with real danger, as they become perfectly uncontrollable, and will often run with the plough directly forwards, through the hedges, or whatever obstructs their way. There is provided, on this account, in some ploughs, a contrivance immediately to set them at liberty on such an occasion. Vide Virgil, Georg. lib. iii. 146—151.

The heifers, steers, and younger cattle, are the most frequently attacked by this fly.

The reader will compare this account with EXP. IND. Ezek. ii. 6. Hosea iv. 16.

TABANUS, *testaceus, tajaq*. Every where. Infests horses. F.

The description of the terrors occasioned by the GAD-ELY, may serve for this insect also.

GNAT *molestus; the stinging*. The size and general appearance of the common humming gnat.

At Rosetta, Cairo, and Alexandria are immense multitudes; they disturb sleep at night; and can hardly be kept out, unless the curtains be carefully closed. F.

"It was not in the power of our Janissary to protect us from the gnats, so great are their numbers. The rice-fields are their breeding places, and they lay their eggs in a marshy soil. They are smaller than those of Egypt, but their sting is sharper; and the itching they cause is insupportable. They are ash coloured, and have white spots on the articulation of the legs." HASSELUQUIST, at Cairo.

BEE. At Aleppo the bee is called *nihil*. R. The caravans of Mecca bring honey from Arabia to Cairo, *Assal nahl* is the most valuable; white and

and brown. Often in the woods in Arabia have I seen honey *flowing*: which is called by the natives *noub*.

White wax, Arab. *schemma abjad*, is collected and brought by the Bedoweens during summer. *F*.

It should seem that this honey *flowing* is bee-honey, which may illustrate the story of Jonathan, 1 Sam. xiv. 27. Apparently, it could not be palm-honey which Jonathan found; for it was a *honey-comb*, and so far out of his reach that it required the putting forth the end of the rod that was in his hand, to be able to *dip* it into this refreshing delicacy. Vide EXP. IND. on Deut. xxxii. 13.

WASP. Size of the common. Four-spotted: common at Cairo. *F*. Called in Arabic, *zinboot*. *R*.

LOCUST, common, wings red beneath.

Var. wings wholly red.

———— *yellow*.

———— *bluish*. About Constantinople, wings blue.

———— *turritus*.

———— *mantis*. Greek, "horse of the earth." Ash-coloured.

———— *crested?* In the deserts of Cairo.

Djackdat. The under wings greenish blue; brown bands at their tails. Not eaten by the Arabs.

———— *ibor ed dubb*.

———— *ash-coloured*. Three black bands.

———— *green*. In the gardens around Alexandria.

———— *the gregarious*, which agrees with the *migratory*, or *wandering* locust: if it be not rather the same. The Arabs every where call it *djerál*, and the Jews in Yemen say it is the *arbeh*. The Bedouins of Egypt lay this insect, living, on hot coals, to roast it; then taking off the wings and legs, they greedily eat it. In Arabia Felix, between *Mocha* and *Táæes*, I saw women and children chasing them very intently, then they stringed them, by passing a string through the thorax, to the number of a hundred together, and sold them for a low price. Not only the feet and wings of the locust are taken off, but the intestines, which are drawn out, together with the head. It is taken as food, and is not hurtful, unless the too great use of it, causes a melancholy temperament, as the Arabs think, which they call *souda*. They give as a reason for their feeding on these locusts, that the locusts themselves feed on the best of vegetables, and even on those of medical virtues, whose good qualities they may be supposed to imbibe.

When a cloud of them is coming they may be known (even their species) by the smell in the air.

The passage of the locusts over our heads, was like the noise of a great cataract. The Arabs say that the locusts do not eat corn when ripe, and already hard; which I found to be true.

F

The leaves of the *zea* and barley, when about half a yard high, were their favourite food; and were soon eaten down to the ground.

The locust-eater (bird) is protected, either by a public edict of the Turks, or by a precept of the Koran; in which book it is spoken of, and is famous. Its reputation for sanctity and service rises from the destruction of 10,000 locusts daily. *F*.

The reader will compare with this account the history of the locust as one of the plagues of Egypt.

We shall add the following information from DENON: the restlessness of this locust will remind the reader of a similar description in Scripture.

"Locust of the Desert.

"The plague of Egypt; it must not be confounded with the other locust, the grey; with which the fields, particularly those of lower Egypt are covered, without their causing any damage. This, whose colours are rose and black, of the same size as the print, is truly a scourge; it comes from the Desert, passes through the country, and ravages like a wasting torrent. I cannot tell whether in a season wherein they find pasture they are more settled; but in the dry season when we were there, they had the inquietude, and instability of hunger which finds nothing to satisfy it. Wild as is the country from whence they come, they are dry and vigorous, like the other inhabitants of the Desert. DENON, Exp. pl. cxi. [Compare Psalm cix. 23. "I am tossed up and down like the locust."]

GRASSHOPPERS; it appears from the testimony of DENON, that there are grasshoppers in Egypt; for so I understand his "locusts which do no damage"—but the creature intended by our public version, under the name *grasshopper*, is certainly a kind of locust. See that article.

MOTH, is properly a winged insect, flying by night, as it were, a night butterfly; and may be distinguished from day-butterflies by its *antennæ*, or horns, sharp at the points; not tufted. But the word *moth* seems to be used in our translation, for an insect in a certain state, during which, it eats garments, &c. made of wool: but this creature, like others, undergoes a transformation, and becomes of a quite different appearance.

The *clothes-moth* is the *Tinea Argentea*; of a white shining silver, or pearl-colour.—It is clothed with shells, fourteen in number, and these are scaly. ALBIN asserts this to be the very animal that eats woollen stuffs: he says it is produced from a small grey speckled moth, that flies by night, creeps in among woollens, and there lays her eggs: which after a little time are hatched by the natural heat of the woollen, and in this state of worms, or nymphs, they feed on their habitation till they change into flying moths, like their parent. This is the English moth—is the Eastern of the same kind?

LEECH, BLOOD-SUCKER; *alak*. Is abundant in

in

in the waters at Aleppo; and from thence is conveyed to Egypt. *F.*

LICE, one of the plagues of Egypt. Vide GNATS.

MAGGOT, or worm that breeds in victuals: such kinds are usually in their progress toward another state: but of what kind that might be which was bred by the manna, &c. we want further information.

SEPIA, *eight-footed*. *Sebbed*, or *arfusis*, or *achtabut*.

At Alexandria is a troublesome animal to men who are swimming in the water: it adheres very strongly to the skin, without occasioning a wound, causing it to burst.

A man who had suffered by this creature told us that it was with difficulty he was able to extricate himself from the painful company of the *sepia*. The place where it had stuck, became inflamed, but without a tumour rising; the pain was intense; the pain penetrated even to the marrow of his bones; and lasted two or three weeks with little abatement.

The *sepia* is found at Smyrna, is eaten by the Greeks, on fast days; and its eggs are esteemed delicacies. *F.*

The Epistle of Barnabas quotes, as if from the Mosaic writings, a prohibition from eating *polypi* of all sorts; certainly including the *sepia*. But

I would ask, whether we have any allusion to such a creature in Scripture?—it seems exactly to describe the conduct of the prostitute, and *if it might be applied* to explain Prov. v. 5. would be extremely expressive. It makes no wound; but sucks till the skin bursts; is not easily removed; occasions a pain extremely pungent, lasting, &c.

SLUG, *marine*, floating on pieces of wood, to which it adhered: in the Mediterranean.

—— a smaller: on floating weeds.

SNAIL, is called in Arabic *hulzoon*, or *bizah*. *R.* ———, *of the deserts*; *helix desertorum*. Found on the shrubs of the Desert, between Cairo and Sues.

The *helix janthinna*, having four horns, two on each side; but all these *tentacula*, (horns) are situated in the same cross-line.

SWEET-SCENTED SHELL, or NAIL.

Unguis odoratus, (*opercula cochlearum*) called *dofr el afrit*, “devil’s nail:” brought from Mocha by Sues, as the Arabs say. Of the blackish a fumigatory is made. *F.*

This is called *onycha* in our translation, Exod. xxx. 34. It is not every reader who would suspect that this was the shell of a sea insect, snail, perhaps. The reader may see some account of it, EXP. IND. *in loc.* and in CALMET, *Art. ONYCHA*. It still keeps its place as a perfume; as appears by M. FORSKALL.

SECOND DIVISION—FISHES and AMPHIBIA.

ECHENEIS NEUCRATES; at Gidda. *Keide*, or *keda*; *kaml el kersh*, i. e. “the louse of the shark,” because it often adheres very strongly to that fish. *F.*

Echeneis (neucrates) the REMORA: at Alexandria; the Arabs call it *chamel*, or *terrhun*. *H.*

Every creature we know has some other which strongly adheres to it; and though I have not happened to meet with a description of that which belongs to the crocodile, yet, no doubt such an one exists. [Comp. SEPIA.] Such, at least, is the inference which seems deducible from a passage in Ezekiel, xxix. 4. “the great dragon (*tanim*) which lieth in the midst of his rivers, in Egypt.—I will put hooks in thy jaws, and I will cause the fish of thy rivers to stick to thy scales, and I will bring thee out of the midst of thy rivers, and all the fish of thy rivers shall stick to thy scales.—And I will leave thee in the wilderness—food for the beasts and fowls.” This passage, no doubt, describes an angling—for the crocodile, I suppose, and after hauling him out of his native waters, a leaving him to voracious animals, which are his neighbours, on shore. This passage also illustrates Psalm lxxiv. 18. where much the same imagery is used: and it justifies our notion that the “inhabitants of the wilderness” should rather be

wild animals than human persons; though it must be owned the word for *people* is in that passage.

EEL. Called *tajaban*, or *hannæsh*. *F.* [Which latter name the reader will recollect signifies a serpent.]

Daredj el tin. The *tahash* of the Hebrews. *F.*

FLYING-FISH. During the whole of our voyage, we saw this fish in motion. It inhabits without doubt the Red-sea. It might fly so far as the camp of Israel; and be the *selav* of the Hebrews. The Arabic name of it is *djeral al bahr*, “sea-locust.” FORSKALL.

“It is not probable that the *selav* was a flying fish; for how should it be possible that a fish which rises but some few yards above the surface of the water, should be able to pass over into Arabia Petrea, and in so great quantities as to sustain so many thousand men? But I have reason to think that the food of the Israelites was neither fowl nor fish, but *locusts*.” HASSELQUIST.

The reader will observe that this fish is called *sea-locust*, whence arose this idea: and similar errors, no doubt, of much the same kind, have arisen on other subjects.

RAY, the common.

The eggs of the common ray (black), called by the Greeks *rina dioudan*, are exhibited as a domestic

mestic medicine in intermitting fevers: being laid on burning coals, the sick person, when the paroxysm is seizing him, inhales the fume arising from them, by his mouth and nostrils. At the second trial, the fever will cease; as some Greek fishermen at Constantinople affirmed. *F.*

The reader will recollect the fume arising from the fish burned by Tobias, when in company with Sarah at Ecbatana, Tobit viii. The exhibition of such fumigations, if customary still further East, which nothing forbids us from supposing, shews pretty clearly the nature of that transaction, and the allegorical manner employed in that work. If we suppose a temporary fever, through excess of passion, to be the disease dispersed by such a remedy, we may dismiss the agency of the evil spirit; and yet admit the physical effect of the medicine.

TETRAODON, Arabic, *drimme*, or *karrat*.

They report, that this fish fed on the corpse of Pharaoh, whence all its posterity became unwholesome, and hurtful to man. *F.*

WHALE, *bætan*. About three years before our arrival, a fish of this kind, forty yards long, was thrown on the shore of the Red-sea.

In the Greek monastery at *Tor*, I was shewn a rib bone (affirmed to be of a giant) the remain of some great fish thrown on the shore at Sues. The Arabs say that the *scarum rivalatum* (*sigan*) is an enemy to the whale, and kills him by entering his nostrils. They support this opinion by an instance of one found dead at *Hateban*, with a *scarus* in his nostrils. *F.*

ZYGÆNA, or HAMMER-HEADED SHARK, *kørnæ*, or *makarran*, at Mascat, *abu kott*. Is rare on the shores of Arabia. It loves muddy depths; not corals, or clear shores. Is dangerous to men. Worse than the great shark. Eats rays.

The female brings ten or twelve young. The sailors of Mascat willingly eat the flesh: thinking it aphrodisiac. The bowels being taken out, they throw away the liver, which soon dissolves in fat. *F.*

BOCHART thought this shark to be the *BAR-serpent* of Isaiah, xxvii. The reader will observe that it is eaten by sailors—who, if they are not inhabitants of the wilderness in one sense—yet in another, are not unlike them: and, indeed, if it is eaten by the sailors, so it may be by those who inhabit the countries near which it is found.

SEAL KIND.

For the general nature of Seals, in their various classes, vide on Lam. iv. plate.

FROG, *akurrak*. *R.* But Avicenna and others use *diphda*, which Bochart thinks is taken from the Hebrew. *R.*

"I heard a noise which appeared to me to be artificial, like that of two sticks struck one against another. I enquired what it was, and they told me it came from many thousands of frogs croaking under water." HASSELQUIST, in Egypt. May 15.

F 2

TORTOISE, LAND, *zolhafæ*, or *buzi*, or *sukar*.

About a foot long; not frequent at Cairo; but more plentiful about Aleppo, and Lebanon; are brought to market in carts. Eaten by the Greeks on fast days as fish: are delicate and savoury food. *F.*

TORTOISE [*marine*] *silhefy*.

—— land. *Silhefy burry*. *R.*

The reader will remark that these two names *silhefy* and *zolhafæ*, are certainly the same, but written according to the differing pronunciations of different countries—the variation is in the vowels inserted; which may reconcile us to similar instances in the Hebrew, where they occur frequently.

LIZARDS, *harbai*, in the deserts of Cairo. Tail imbricated, long; feet five-toed. A series of warts on its fore-legs.

—— agile, *orhanæ*, or *sohela*.

—— chameleon, *fochacha*. By the inhabitants of Hadie, *makrif*. In the writings of the Arabs, *hærbæ*.

—— *ærdan* at Hadie.

—— *nilotica*. *Varan*.

—— *Egyptian*. *Dabb*.

—— spotted. *Schlie*.

The **GECKO**, called in Egypt *abu burs*: "father of leprosy," i. e. extremely leprous: at Aleppo, *burs*, "leprosy." Is frequent in the houses at Cairo; wanders about in summer weather; has much the same squeak as a weasel; is not seen much in winter, but hides itself in the roofs of houses, and re-appears in the middle of March. If the tail be separated from the living animal, it will give signs of life, and motion, half an hour afterwards. They say, this lizard hunts and lives on poultry. His name is said to be derived from his properties; for if he drops any of his spittle in salt intended for the table, it would produce a leprosy on any man who should partake of it. For this reason they carefully put away the salt, or keep an onion by it, which this lizard cannot bear. Others think his name is taken from the resemblance of his colour to that of a leper. *F.*

SERPENTS, *lebetinus*. *Aspis*?

—— spotted, harmless.

—— *haje*, deadly, his neck swells. *Nascher*.

—— *dhara*, copper-ash-coloured.

—— *schokari*, banded; no fangs.

—— *bætæn*, spotted, deadly.

—— *hölleik*, red, burning.

—— *hannash asuæd*, black, not fatal.

—— *hannash æber*, i. e. "the ash-coloured serpent." When angry swells his neck.

—— *ærkam*, ash-coloured.

—— *bæschasch*, the horned *cerastes*? The same species with the horned *datan*, which burrows in dry and loose earth. If a traveller slips his foot into one of them, the *datan* bites him fatally.

fatally. It is also called "king of the serpents"—*sultan el hanash*. Its colour is red. *F*.

Several other names of serpents are mentioned by M. FORSKALL, but they are names only. We shall translate his descriptions of those which relate to our object.

HANASH ÆSUÆD. Wholly black: a cubit in length; as thick as a finger; oviparous. Its bite is not incurable, but the wound swells a little: the application of a ligature prevents the venom from spreading; it may be sucked out, or certain plants, as the caper, are employed to relieve it.

It is said, that this serpent enters a camel on one side, and passing through the belly, comes out on the other side; which, certainly destroys the camel, unless the wound be cauterized with a hot iron; and this the common people make use of. *F*.

Count DE LA CEPEDE wishes for further information on this story. It appears to me, that when the camel is crouched down, as he always is during night, that this serpent may pass under him, and finding some trouble in the passage, may bite him, in more places than one; to prevent the effects of his venom, which may sometimes be worse than at others, the Arabs have recourse to the actual cautery.

Compare this idea with that of Dan, as a serpent biting a horse; and vide CERASTES, plate, Gen. xlix. 17.; also the *Datan* above.

BÆTÆN.

Is wholly spotted (in blotches) black and white. A foot in length: nearly two inches thick. Oviparous. Its bite is instant death: the body of the wounded person swells greatly. *F*.

Having suggested the idea that this *bætæn* is the *peten* of the Hebrew Scriptures, and wished for further information respecting it, I shall take the additional liberty of querying, whether it is not strongly related to, if not a variety of, the *coluber lebetinus* of Linnæus? and under that persuasion shall extract first M. FORSKALL's description of this serpent, and shall then add from HASSELQUIST. *Linnæus* was the first naturalist who mentioned it. The formation of its name will not escape the reader: the termination being merely Latin, it would stand *le BETINUS*.

Coluber lebetinus. The length of its body less than a cubit: its tail four inches: toward the neck thinner, an inch and half thick. Head broad, depressed, subcordated. Scales of the back obtuse-oval, flat, a ridge rising in the middle, carinated. Back rising in *dos d'ane* [not round.] Colour, upper part grey, ordinarily four transverse bands, alternately crossing. The middle of them verging to yellow, but the sides to deep brown, or black. Underneath whitish, and closely spotted with black dots. *Scuta abdom.* 152. *Squamæ caud.* 43.

OBS. Its bite produces lethargy, is fatal and

incurable. Two of these serpents were sent me from Cyprus, by my friend *Petr. Sjelvi*, interpreter to the French embassy at Cairo. The species is not [but?] small: is it therefore the *aspic* of the ancients? so it is now called by the *literati* of Cyprus: but the common people call it *kufi*—(κῦφι)—"DEAF." FORSKALL.

"I saw two kinds of vipers at Cyprus, one called *aspic*, of which it is said, 1. That it contains a venom so penetrating as to produce a universal gangrene, of which a man dies in a few hours. 2. That the better to catch its prey, it takes the colour of the ground on which it lies. They said of the other, 1. That it has a great antipathy to the former, and destroys it. 2. That they eat one another. 3. That they feed on larks, sparrows, &c. of which I myself am witness." HASSELQUIST.

Now I think these are not unlike in size to the *bætæn*; one is a foot in length, the other under 18 inches: one is nearly two inches thick, the other where narrow, one and a half. One is spotted, black and white, the other is grey, black and white in bands: both are fatal. Observe the *gangrene* which follows their venom. Compare Isaiah xi. 14. plate. Observe the name, *deaf*; compare Psalm lviii. 4. where *deafness* is ascribed to the *peten*. Vide also Job xx. 14. EXPOS. IND. where this serpent is considered as the *aspic*.

The HAJE, Arab. *nascher*. When being angry it intends to bite, it raises its neck, and lengthens itself as much as it can, that it may throw itself with an impetuous motion on its enemy. The jugglers of Cairo frequently carry him about, take out his fangs, and very dexterously avoid his bite when he swells his neck. His venom is pellucid, yellowish. A fowl being slightly wounded, and this venom infused, gave at first no sign of pain; but, after a quarter of an hour, fell on its breast, suffered violent convulsions, twisted its head about, and, after throwing up a great deal of water, died. On dissecting it, nothing was found injured; but the intestines were somewhat swelled; the rest was all sound. *F*.

Compare with this account of the progress of venom what we have remarked on the progress of wine, from Prov. xxiii. 32. on Isaiah xi. 14. Plate.

I consider the Arabic words *hanash*, *nasher*, &c. to be analogous to the Hebrew *he-nahash*, i. e. "the serpent."

If we pronounced our word viper, *vi-pher*, laying an aspirate on the *p*, it would resemble the Arabic and Hebrew *apha*, *apho*, *apher*.

Vipers alive sell for one para each: dried, four paras, at Cairo. *F*.

The country, and rustic life of the Arabs, enable them to acquire much of what may be termed domestic medicine; and though part of what they report may be erroneous, yet there may be many things known to them which might be useful to human

human life. The *lignum Quassia*, received in our shops, owes its first discovery to the slave *Quassi*. On the same occasion, no doubt, as the alexipharmica, or antidotes, were discovered, the art of *taming serpents* likewise made its appearance, which the vulgar call juggling, and which till this day we have not made public any farther than as hearsay, and as report. That eminent traveller KÆMPFER saw, but did not examine into, these charms. It is still uncertain whether a plant, that defeats the effects of poison, does also, by virtue of antipathy or dread, have the same effect on serpents. Horticulture, with an attention to alimentary concerns, has of late taught us that

animals have a very great aversion to some plants, and fondness for others.

An instance that occurred in the island of *Bombay*, was related to me by an Englishman during my stay there, and furnishes a compendious method of illustrating these mysteries. He kept a certain animal (of the class of quadrupeds) which would not, on any account, attack serpents admitted into the hall or dining-room; but in the garden or open field commenced the engagement swiftly with the *cobra di capello* itself: for this reason, I suppose, that it had a cure ready at hand in the adjacent wood. NIEBUHR'S Note in FORSKALL.

THIRD DIVISION—BIRDS.

AIR BIRDS.

BEE-EATER, *merops*, *schæghagha*. Yemen. Frequent in the woods. Lives on insects. *F. Wurwar*. R.

CUCKOW, *humam*, *kowal*. R.

DOVE, TURTLE: 1. reddish; 2. flesh-colour.

The dove-houses in Egypt have been described and delineated by travellers. These birds are bred in great plenty. Except water, no food is given them; they find for themselves in the meadows and fields. Doves' dung is used to saturate the earth where the melons, &c. grow; beside which the earth of Egypt is not wanting in other restorative principles where it is cultivated. *F.*

Called *hamâm*. *Djahleb*. *Teir humam*. R.

—— common pidgeon. *Hudjæsa*.

EAGLE. The fishermen report that an eagle will, as they have seen, plunge into the midst of a shoal of *chætodons* (horned flattish fish), which often consist of three or four hundred, and the shoal being pressed close together, will bring up one of these fish on each of its claws.

An **EAGLE**, *nisr*, that lives on flesh and *car-rion*, is enumerated among the migratory birds at Lohaia. Comp. Matth. xxiv. 28. Job xxxix. 30.

—— **VULTURE**. *Rehmy*. R. — *Pacham*. *Bruce*.

—— **SEA EAGLE**.

—— **KITE**.

HAWK. Frequent in Egypt in winter. *Haddaj*.

HERON, common. *Balekdail*. R.

NIGHTINGALE. *Bilble*. R.

RAVENS. *Oreb*. *Ghoreb*.

—— crow. *Zagr*.

—— Royston crow.

—— jack-daw.

—— magpye. At Aleppo. R.

RAVEN, *ghoreb*, lives on carrion. *F.* This being the *oreb* of the Hebrews, shews the pronunciation of that word. Vide EXP. IND. on Zeph. ii. 14.

N. B. From *ghoreb-us* is easily traced *corvus* — *corvus*: also the *gor-crow* of Ben Johnson.

LAND BIRDS.

BUSTARD. *Hebry*. R. No doubt the *houbary* of Dr. Shaw.

—— *Arabian*.

DOMESTIC FOWL.

OSTRICH. *Naameh*. R.

OWL, EAGLE, *boomî*.

—— common barn.

—— little. At Aleppo. R.

—— **MUSLEM**.

When a man is dying, this bird is not far off, and screams *fat, fat*, which in Arabic signifies "he is going." *F.*

PARTRIDGE, *kurr*. *F. Hagel*. R.

In the province of Andalusia, in Spain, the name of the partridge is *churr* (Latham). This no doubt is taken, like the Hebrew, from its note.

PEACOCK. *Tawooz*. R.

WATER BIRDS.

BITTERN.

CRANE, *white*. *Kohnobi*. The feet and plumage under the wings red, so that, when flying, it appears all red, these parts principally being seen. *F.*

STORK, *white*. *Liglek*. R.

HOOPOE. *Shibubook*. R.

KINGFISHER. *Balikgi*. R.

PELICAN, ONOCROTALUS. *Ahdjirbu*. This bird is not uncommon on the shores of the Nile. I afterwards found it occasionally on the islands of the Red Sea, where it makes its nest of twigs. She lays four eggs, white, clouded with brown; the size of goose-eggs. The mother flies away from her nest, and does not return during two hours. This appeared wonderful to me, as it must do to whoever comes from a northern clime, where birds during their sitting time are ever clamorous, perpetually returning to their nests, and flying around them. Not that the Pelican has forgot her nest, but that the heat of the climate permits her longer absence. *F.*

BAT,

BAT, DOGHAR. *Bat?* Flies by night: lives on the fruit of the coffee-tree. When it is gorged, and can eat no more, it vomits, which has occasioned an opinion that it has no *anus*.

BAT, Adsia.

The Arabs of the Desert bring the dung of bats, which is used in medicine. *F.*

"The bat of Egypt is of the size of a small mouse; inhabits the gardens of Rosetta, near the edge of the Nile." HASSELOQUIST.

As the Migration of birds is not only a very curious subject in itself, but is mentioned explicitly in Scripture, and may also contribute to discover some of the obscure birds of Holy Writ, we shall insert the notices of Mr. FORSKALL respecting it: they may lead us to determine the birds occasionally resident in Judea.

MIGRATORY BIRDS AT CONSTANTINOPLE. WINTER.

WILD GOOSE, and WILD DUCK. Plentiful in fresh waters and marshes. In the beginning of spring they go away.

THRUSHES. *Grives.* Come in September. Go away to the north.

GREY PARTRIDGE comes in the depth of the cold weather, December or January. Builds its nest in this period. Often comes in September; goes away in March.

SPRING.

MARTIN, SWALLOW, comes in April: builds.

LORIO comes in June; remains till September: goes to warmer climates. Feeds on grapes, figs, and mulberries.

REDWING comes in February.

AUTUMN.

HOOPOE comes at the same time with the **CHATTERER**, in August, from the north. Goes away the beginning of winter.

KITE passes in September.

BEE-EATER, from the middle of August to the end of September.

QUAIL comes and departs at the same time with the foregoing. In April returns from Egypt, as is believed, is then called "the green quail," because the fields begin to be green at this time. Stays to the end of May; then passes over to Crim Tartary, crossing the sea, in which it is assisted by the wind, which raises them on the wing.

STOCK Doves come in the middle of September in innumerable multitudes. Feed on acorns. Perhaps go farther in Asia.

WOODCOCK passes in September, going towards Syria; in February and March returns, going north.

BECCAFIGO comes in August; seeks the ripe figs in September and October. When these are gone returns home.

Several other species accompany this: among them one with a black head.

SWALLOWS many, and of various species, fly over in autumn, to winter, as do many other birds.

The **LESSER BITTERN**.

The **AVOCETTA**.

A **GULL** with a red bill, black at the tip, seen flying in February.

Birds constantly resident at Alexandria, from the relation (and on the credit) of an Arab sportsman.

KITE,	Arab. <i>Hæddaja</i> .
SCREECH OWL,	<i>Bûma</i> .
EAGLE,	<i>Nisr</i> , Heb. <i>nessher</i> .
FALCON, gentle,	<i>Schahîn</i> .
PELICAN,	<i>Bæshâu</i> .
BIRD OF PARADISE,	{ <i>Affurt ildsjænna</i> , or, bird of paradise*.
BAT?	<i>Abu sjærra</i> .
VULTURE,	<i>Sâkr</i> .
STARLING,	<i>Lehahrûr</i> .
LESSER BITTERN,	<i>Ariel</i> .
COCK of the woods,	<i>Farchâ</i> .
GOATSUCKER	{ <i>Mlâhhit rájan</i> , or, <i>Abu num</i> .
PHEASANT,	<i>Hbâra</i> .
RAVEN, crow,	<i>Gorâb nuáhhi</i> .
PIGEON,	<i>Hamâm</i> .
TURTLE,	<i>Jemâm</i> .

Beside many others, of which the Arabic names are only given; among them are *râchama*, and *sælva*.

MIGRATORY BIRDS, in Egypt.

The month before the inundation of the Nile come *arfur*, *water-wagtail*, *beccafigo*; they go away when the rains are coming heavily, *i. e.* in the beginning of November.

With the increasing Nile come

Gimri, a **TURTLE**. It lives on the gatherings of the harvest; when that is over and consumed, it goes away.

Suffair, the **LORIO**. Goes away the beginning of November, when the cold comes; and sometimes all go in one day.

Summân, the **QUAIL** comes and goes at the same time as the former; but this changes its abode by night. Comes from Cairo.

Kurki, or *uæs arâki*, or *aigriæs* comes to Constantinople in October. After three months returns, or goes to India, as some think. [Is, perhaps, of the **GOOSE** kind.]

Uæs, the **GOOSE** (*wild*), comes from Russia in October, and accompanies the *kurki*. Goes away at the same time. [From *uæs*, perhaps *g'uæs*, goose.]

Gorab suggait comes in October from Ethiopia (*Sudân*); remains three months, while the dates and beans are growing; then goes away. A bird of the raven kind.

* Rather "bird of the gardens," supposing the Arabic *djænna* to be the same as the Hebrew *gan*, of which it shews the pronunciation.

Abu fasadi, WAGTAIL, comes in October from Turkey. Goes away the beginning of harvest.

Achdar, WHITE DUCK, the male.

Sir sæiræe, a DUCK: plentiful about the shores of the Red Sea.

N. B. Many others are mentioned, but they do not appear to be to our purpose.

At LOHAIA—*permanent*.

PHEASANT, *louam*, in the wild woods of Yemen.

FALCON, *ságr*.

HAWK, *schahia*, *hendia*, *hædæ*.

LARK, *gombaran*, *abu gâba*.

SPARROW, *samel*, *salacissimus*.

VULTUR PERC. *Rocham*. White; lives on carrion.

Among others I find mentioned *tæjr el hind*, "wholly-golden" (dove, I suppose). It sells for the value of a Hungarian imperial. How much more would it fetch in a foreign country?—Comp. on Psalm lxxviii. 13. 7.

TERRESTRIALS.

FIRST DIVISION—VERMIN.

UNCLEAN,

Having too-numerously-divided toes, or claws.

1. Eaters of vegetables.

CONEY, or SHAPHAN. Vide EXP. IND. on Prov. xxx. 26. plate.

HARE, *arneb*.

RABBIT, *arneb*.

The same as the Hebrew *arneb*.

HEDGEHOG is called *hærbe*, or *ganfud*.

PORCUPINE, the same. Vide on Isaiah xiv. 3. Plate.

2. Eaters of living prey.

FERRET.

—— Ichneumon.

—— WEASEL. Vide plate, MOLE. Lev. xii. 29.

MOUSE, the domestic, is called in Arabic *far*.

RAT, *jirdoon*. R.

All the field-mice are vulgarly called *far burri*, and sometimes *jird*.

JERBOA. Vide plate of SHAPHAN, on Prov. xxx. 26.

MOLE, *khuld*. Vide on Lev. xii. 29. Plate

3. Digitated Quadrupeds.

MONKEY. The *dog-headed*, is the size of a

small bear; more than two feet in length, about a foot and a half high, and two feet in circumference. He is hideous to look at, especially behind. He resembles a bear; is cruel, faithless, and extremely difficult to tame. Is found in Ethiopia. I saw one at Cairo during the inundation of the Nile, which strollers had brought to divert the populace. H.

—— The *Ethiopian*, is nearly the size of an ordinary cat, and is found in Ethiopia, from whence the negroes bring many into Egypt. The female has periodical discharges. Is very docile. HASSELIQUIST.

APE, *tailed*; *robah*. Buttocks naked.

—— Another brought from Nubia, called *hisua*. Both seen in Egypt. FORSKALL.

"Apes are called *kurd*, *maimon*." RUSSELL.

BABOON, *shoir*, *saadan*. [Perhaps this name is allied to the Hebrew *sadim*, or *shadim*, Deut. xxxii. 17. Psalm. cvi. 37.]

There is a very great uncertainty in the Hebrew, on the *kophim*, or *apes*, of this division. For the *baboons*, or "*hairy*," which our translation renders *satyrs*, vide on Isaiah, xxiv. ii. EXP. IND.

SECOND DIVISION.—LARGE BEASTS,

Also DOMESTIC BEASTS.

1. With undivided hoofs. UNCLEAN.

ASS, *Jihash*, *hamar*.

MULE, *burhl*.

HORSES, *hysan*, *furras*. Heb. *peres*.

Furras, in strict propriety, is a mare; but in common discourse the word is used indiscriminately with *hysan* for a horse. *Heil* is vulgarly used in the plural. R. Arabs ride mares in preference to horses.

"D'Herbelot, under the word *faras*, gives an account of an Arab author, who, treating professedly on the subject of horses, mentions the several races"—of the noble breeds. RUSSELL.

The foregoing extract justifies what we have said in Habbakuk on the propriety of rendering the Hebrew word *peres*, or *pheres*, *phurras*, by "horses of a generous breed,"—it is clearly the Arabic *furras*; and as the Arabs ride mares in preference to horses, because they do not neigh, and are more docile, so we see how it may even in the Hebrew denote *mares* (or horses, taken generally)—it ordinarily is used after the common race of horses has been mentioned.

It is impossible for us to conceive the affection of the Arabs for their mares, which form part of the family as much as the children; but this is

lost in our translation, where *phurras* is rendered *horsemen*.

HORSE. Beside the proper name for this animal, several others appear to indicate it; as *riding*, i. e. an animal for riding; for a *rider*, &c. according to its use.

Ass. Vide on Job xxxix. plate.

MULE. Absalom rode on a mule, *parad*, 2 Sam. xiii. 29. xviii. 9. Messengers sent by mules, *recash*, Esther viii. 10. *Elias Levita* thinks it to be a species of camel. Anah found mules in the Desert, Gen. x. *iamin*; much uncertainty whether a people so called, or fountains of hot waters. Vide **MULE**, in **CALMET**, *Dict.*

CAMEL, common. Heb. *gimel*. Arab. *djammel*.

An animal made to sustain the labours and inconveniences of southern countries. Its mouth and gums are covered with a wonderful cartilage, not injured by the thorns with which almost all the desert plants are armed: other animals cannot touch such plants, but the camel is voracious of them. **F.**

DROMEDARY. Heb. *ramak*. Arab. *hadjin*, at Aleppo *rahileh*. **R.** Not a different species, but a different race, from the camel; of a slender body and slighter make; especially the head, neck, and legs; in speed swifter than a horse. This is also called *aashan*. **F.** I suppose this to be the same as the *aashari* of Scripture.

———— The **BACTRIAN**. *Bócht*. Has two humps on his back. Is not a native, but is carefully attended among other uncommon animals. **F.**

The camel's hair, which is shed annually, is employed for various purposes, particularly in the manufacture of felt, called *lábett*; this being almost impenetrable to wet, is used as a wrapper for bales of merchandise, which in certain seasons are exposed to heavy rains, and when the caravan rests, are laid on the bare ground. Of *lábett*, also, the camel-drivers and shepherds make great coats. **RUSSELL.**

This certainly supports our idea that the *camel's hair* of John Baptist was not a skin in its undressed state, but was a coarse manufacture composed of this material. The same stuff as makes great coats for shepherds and camel-drivers might certainly be esteemed sufficiently *inferior* for this prophet, who was a priest's son; but, I suppose it was also stout, lasting, and would want little *renewal* in the desert, where its services were required for decency and protection, not for shew and appearance.

CLEAN.

Hoofs completely divided into two parts only.

“**BEEVE KIND.** *Al bukre* is the Arabic general name. *Al thaur* is applied only to the bull. Veal is called *adgell*.” **RUSSELL.**

This corrects a misapplication in **EXP. IND.** on Isaiah xi. No. 12. where we have supposed

bekar, the same as the Arabic *bukre*, to import the *male* of the species: but, if the Hebrew in this agreed with the Arabic, as I suppose, from both words being found in both languages, then this restriction is unfounded, and *bekar* must be taken *generically*.

The pronunciation of the Arabic, *adjel*, shews that of the Hebrew *ogel*, a calf. The arrangement probably should stand thus:

Beeve kind,	<i>bekar</i> ,	<i>al bukre</i> .
Bull,	<i>shur</i> (Chald. <i>taur</i>),	<i>al taur</i> .
Young bull,	<i>par</i> .	
———— cow,	<i>parah</i> .	
Calf,	<i>ogel</i> ,	<i>adjel</i> .
Zebu, or little	} <i>thauch</i> ,	<i>beker el wash</i> .
Barbary cow,		
Buffalo.		

HASSELQUIST mentions a custom of the Greek ecclesiastics at Magnesia:—“The priests having washed and dried their feet [of their guests], anointed them with *fresh butter*, which, as they told me, was made of the first milk of a young cow;”—perhaps the first milk of a cow which had recently calved. May this illustrate the words of Job, chap. xxix. 6. who speaks of “washing his steps [*steppers*, feet, perhaps,] with *butter*; and the rock poured him out rivers of oil” for his personal accommodation. This application of *butter* may be new to us, but is not so to the East: the king of Abyssinia anoints his head with butter daily, says **BRUCE**.

CAMELOPARDALIS. *Giraffe*, *zurnap*.

Found in Ethiopia and *Sennar*, in the wilds: probably not mentioned in **S. S.**

CHAMOIS.

Found in icy mountains: probably not mentioned in **S. S.**

DEER. Stag.

———— Fallow. Heb. *ail*.

GAZELLE, or **ANTELOPE**. Heb. *tzebi*. Arab. *dabi*, or *gazell*.

For a similar difference of pronunciation of the same word, as in *tzebi*, and *dabi*, see the article **ÆNA**, *dzubba*, *dubha*.

“The *gazelle*, when taken alive, becomes (except when old) familiar, and is allowed to walk in the court yard, or the public *khane*.” **RUSSELL.**

It will be seen, that on 1 Kings iv. 23. we proposed to render what our translators call *fatted fowl*, by “wild game;” and it should appear that the word *barbarim* is capable of this meaning; but it may not be amiss to add what **RUSSELL** tells us, that in the hunting of wild game at Aleppo, “the company, consisting of twenty or thirty horsemen, servants included, draw up in a line at the distance of six or eight feet. Near the end of the line, which is termed the *barabar*, two brace of greyhounds are led by footmen, and advanced a little before the centre. The falconer rides. In this order the *barabar* marches slowly; and as soon

as the hare is put up, one, or a brace, of the nearest hounds are slipped, and the falconer, galloping after them, throws off his hawk. Such of the company as choose follow; the others remain standing in the *barabar*, to which the sportsmen return when the chase is over." I would query whether the *barbar* of the present Aleppines has any similarity to the *barbarim* of the Hebrews, so that the latter may signify "beasts of chase;" beasts hunted by means of a company, therefore called *barbarim*, the company itself being the *barbar* or *barabar*?

GOAT, common. Heb. *otz*.

—— long-eared.

—— hairy.

—— rock. Heb. *iolim*. Arab. *baeden*. Brought from Hedjas.

UNCLEAN.

3. Hoofs divided into more than two parts.

ELEPHANT. Vide 1 Kings x. 18. Plate.

HIPPOPOTAMOS is very rarely seen in Egypt now, but keeps up above the cataracts. He lives equally on land and in water, but feeds on land; and when he enters cultivated grounds, consumes vast quantities of their productions. The Egyptians say he is the enemy of the crocodile.

What we know of him is chiefly from southern Africa, where he is numerous in the rivers at a distance from the colony.

Whether the BEHEMOTH of Job be the *Hippopotamos* or the *Elephant* has been doubted; if it be not the *Elephant*, then there is but little authority for supposing that animal to be mentioned in Scripture.

RHINOCEROS, is called *karn chartit*, "horn nose." Is brought from Nubia. Colour reddish, or whitish. But the horn, which is brown, is thought to be the best antidote against venom and poison; for which reason cups are made of it, valued at five ducats. F.

THIRD DIVISION.—FEROCIOUS ROAMERS.

UNCLEAN,

Having too many toes, or claws.

DOG, common. Heb. *caleb*, Arab. *kelb*.

—— Greyhound. Doubtful if mentioned in Scripture.

HYENA, *dubba*: in the Desert.

His tail not striped in rings. Not spotted. Body whitish; crossed by bands. The hairs of his back very long, and very stiff. The Arabs employ his flesh in medicine. F.

"HYENA, *dzuba*. Heb. *tseba*. R.

G

The reader is desired to add the following to those remarks on the Rhinoceros which accompany the plate; I believe they complete all the allusions to him in Scripture.

Psalm xxix. 6. "He maketh Lebanon and Sirion to skip like a young unicorn." Dr. PARSONS says of the young one brought to London,—“He appeared very peaceable in his temper, for he bore to be handled in any part of his body; but is outrageous when struck, or hungry, and is pacified in either case only by giving him victuals. In his outrage he jumps about, and SPRINGS TO AN INCREDIBLE HEIGHT, driving his head against the walls of the place with great fury and quickness, notwithstanding his lumpish aspect. This I have seen several times, especially in the morning before his rice and sugar was given him; which induces me to think he is quite indomitable and untractable, and must certainly run too fast for a man on foot to escape him.” *Phil. Trans.* vol. xlii. p. 529.

Psalm cxxxii. 17. "I will make the horn of David to bud." This is very remarkable: what horn (single) that we know of is capable of *budding*, by the addition of a second horn of the same kind to it,—which is evidently the import of the place; meaning, as the second horn of the Rhinoceros is a sign of strength, arising from full pasture, and a vigorous constitution, so shall David manifest an increase of power, dignity, and vigour.

Jeremiah xlviii. 25. "The horn of Moab is cut off." If the horn of a bull were cut off, he would still have one left; but the horn of a Rhinoceros being (usually) single, if that be cut off, his power is removed with it, as was the case with that kept at Versailles.

What other creature occasionally single-horned and double-horned, [or species?] corresponds with these characters of the Rheem in Scripture?

HOG, the wild, is common in many of the marshes by the river sides in Asia. They grow to great size; are occasionally killed in sport, but their flesh is not eaten by the inhabitants.

JACKAL, or SHACALL, Heb. *shuol*.

The Jackal appears to be of two kinds: the lesser is called *fox* by HASSELQUIST.

WOLF, *zahab*. Heb. *taaleb*, Arab. *dorén*, *dib*. Beside the common, wolf, there is a black wolf.

CAT KINDS. Lions, leopards, &c.

Anomalous.

BEAR. *Dub*.

BADGER, in our translation, is in the original *tahash*. We have, in FRAGMENT, No. cccxciv. supposed this *tahash* to be of the seal kind.

Miscellaneous

*Miscellaneous Information furnished by M. FORSKALL, applicable to
Illustration of Scripture, extracted from sundry Places in his Work.*

FOLIATION.

TIME OF RE-APPEARANCE OF LEAVES ON
THE TREES.

MARCH 22, 1762. I saw all the gardens of Cairo, clothed with leaves, except the black mulberry, and the mast-bearing beech.

The same time the thorn *zizyph.* put forth leaves. The rest follow this order, as reported by the gardeners.

- | | |
|-------------------------|-------------------------------|
| 1. Mulberry, white. | 11. Liquorice. |
| 2. Wine-vine. | 12. Platane, oriental. |
| 3. Plumb, Armenian. | 13. Mimosa, acacia. |
| 4. Almond, common. | 14. Thorn. |
| 5. Pear-tree, domestic. | 15. Bread-tree. <i>Melia,</i> |
| 6. Willow, Babylonian. | <i>azederach.</i> |
| 7. Pomegranate. | 16. Apple-tree. |
| 8. Plumb, domestic. | 17. Beech, mast-bearing. |
| 9. Willow, <i>ban.</i> | 18. Mulberry, black. |
| 10. Fig, for drying. | 19. Mimosa, <i>lebbek.</i> |

SHEDDING OF LEAVES, towards the end of December. Observed at Cairo.

ORDER OF DEFOLIATION.

- | | |
|--|--|
| 1. <i>Melia, azederach,</i> loses its leaves first of all. | 9. Pomegranate. |
| 2. Wine-vine. | 10. Peach. |
| 3. Mulberry, white. End of December entirely stripped of leaves. | 11. Beech, mast-bearing. |
| 4. Pear, domestic. | 12. Platane, oriental. |
| 5. Plumb, Armen. Dec. 23, began to shed its leaves. | 13. Fig, for drying. |
| 6. Apple-tree. | 14. Thorn |
| 7. Mulberry, black. | 15. Willow, Babylonian. |
| 8. Almond, common. | 16. Liquorice. |
| | 17. Plumb, domestic. |
| | 18. Mimosa nilotica, or true acacia. |
| | 19. Mimosa <i>lebbek</i> : of this kind I have seen some ever-green. |
| | 20. Willow, <i>ban.</i> |

EVER-GREENS.

- | | |
|---|--|
| 1. Citron, all varieties. | 7. Fig, sycamore. |
| 2. Ricinus-tree. | 8. Olive. |
| 3. Cordia. | 9. Thorn, <i>nabeca.</i> |
| 4. Cypress. | 10. Tamarix, <i>atle.</i> |
| 5. Armona, smooth, (cuscus-tard-apple.) | 11. Cassia, fistula. |
| 6. Palm, date-bearing. | 12. Plantain, Musa <i>Pa-</i>
<i>radisaica.</i> |

SHADOWING TREES.

Woods in Egypt, none. The palm-tree, (date-bearing) grows in various places, in earth apparently steril and dry: but in the neighbourhood of water; as for example at Birket el hadj, a lake near Matarea.

[Sir SIDNEY SMITH told the British officers in

Egypt, that they might always find water by digging to the roots of a palm-tree.]

The tamarix, *atle*, is planted by human labour.

The following trees grow by the way-side, or in places which they shade.

Fig, sycamore, every where, plentifully.

Mimosa, *nilotica*, frequent.

——— *lebbek*, scarce.

Thorn, *nabeca*, frequent.

Tamarix, *atl*, various places.

Cassia, *sophera*, ditto.

——— *fistula*, ditto.

Ricinus, common, frequent.

Willow, Babylonian, various places.

——— Egyptian.

——— *Ban.* var. pl.

Melia, azederach.

Platane, orient. rare.

Poplar, white and black.

Cypress, ever-green.

Liquorice, rare.

Cotton-tree, scarce.

Cordia, *myxa*, scarce.

Myrtle, Brazilian.

(Fan-spreading palm.) *Borassus flabellif*: seen in one place in Cairo.

The bean, *sesban*, (dolichos) winds around stems, supports, &c.

The bean, *lablab*, (dolichos) frequent in gardens, and is led up to the roofs of houses.

Wine-vine; overshadows the streets, and the roofs of houses. On the garden walls are placed in an inclined position, a kind of treillage of thin sticks, which is overspread by the vine; by this contrivance, the fruit ripens sooner, the garden is furnished with a higher enclosure, and the general appearance is greatly improved. [Vide Zach. iii. 10.]

Passion-flower, *cerulea*; shelters near the house.

Helianthus annuus, (sun-flower.) Is sown round the edges of the field wherein melons, &c. are planted, and forms a temporary enclosure, which is serviceable to those plants.

[See what we have said on the DUDAIM of Reuben, as being found under shade, &c.]

M. FORSKALL, also, reckons the *cucumis dudaim* among the odorous plants.]

FRUIT-BEARING TREES.

Palm-tree (date-bearing) frequent.

Wine-vine, frequent.

Mulberry, white; variety, red.

——— black.

Pear, common, rare.

Apple, extremely rare.

Cherry,

Cherry, scarce: I saw none.

Pistachia-tree, extremely rare.

Fostog alajmi, an unknown tree; its leaves like the fig-tree. Brought from the village *Alajm*, near Aleppo.

Fostog schærgi, a like fruit, of Aleppo.

Perhaps both are of the *pistachia* kind.

Fig-tree.

Carob-tree, or pod.

Plantain-tree, frequent.

Citron; various species.

Melon thistle, (*cactus cochenil*.)

Custard-apple, (*annona*) smooth.

Olive.

Pomegranate.

Thorn, *zizyph*. A cold infusion of the fruit is much in use; it is purgative and cooling.

Peach, in various places.

Plumb, domestic.

——— Armenian, a variety.

——— a) kernel *sweet*; called by the Aleppines, *mishmish lauzi*.

——— b) kernel *bitter*; called *kelabi*, or *murr*.

BREAD CORN.

Rye and oats are not cultivated in this country, but are in a manner unknown.

Wheat every where cultivated, and made into bread and drink.

Barley, scarce; ripe March 22. From a single root often grow twenty ears; near ten inches distance between each plant. It is cultivated as food for horses, fowls, &c. When the yearly crop of bread corn fails, it becomes a substitute. A drink is prepared from it by the common people, called *buza*.

Holcus (millet) *durra bæledj*, in various places. The country people make their bread of it.

Zea majs, *dura*, scarce. The spikes are eaten parched: they are savoury.

Nabk el barr, (an obscure plant.) The grain is brought from Barbary; from which, bread is sometimes made.

Mesembryanthemum, (fig-marygold,) *geniculiflorum*. Is not grateful to cattle; but is used by the Bedoween Arabs as a substitute for wheaten bread. It is not used by the Egyptians. The capsules are soaked in water, and dried in the sun. They are then smartly beaten, to get out the seeds, which are ground to meal; this is made into a paste by the addition of water and salt, without leaven; thin cakes of this paste are baked on a plate of heated iron, called *sadj*.

Rice. In Egypt, above Rosetta and the Delta, less and less is cultivated, because the shores of the Nile become bolder, and by their height, prevent the constant supply of water. The rice is sown before the increase of the Nile, which brings a sufficient supply of moisture. When the river subsides, art and labour raise the water, even copiously, so that the roots are constantly under water.

WOODS FOR CARPENTRY.

WOODS COMPACT AND BEAUTIFUL.

Thorn, *nabeca*, wood red and white.

Cornus, *gharaf*, (dogwood.)

Tamarix, *atl*, for nails of wood.

Tænab.

Fæssi.

Bsass.

Meti.

Dahi, *chashab*.

Hamrur, for posts.

Aksir, } very hard,

Djandal, } as iron.

Varaf, for palings, pallisades.

Darahh, for lances: Lrought from *Sana*.

Haledj, stout, hard, and very much used for domestic utensils.

WOODS SOFTER, AND NOT SO VALUABLE.

Cadaba.

Sceura.

Gataf.

Kafal.

Tæfi, } *Corypha umbraculif*.

Nach, } Palm, date-bearing.

Both woods are fibrous, and long resist putrefaction.

In building of houses they are laid between the courses of stones, &c. to strengthen the walls.

Sadj, }

Abnus, or *ebenus* (i. e. ebony) } brought from India.

schischam, }

Baschkil.

Dhan, or zan, from Cairo. For lances.

Panicum (panic-grass) *dichotomum* and *setigerem*.

Overlays the roofs of houses.

Sciopus triquetrus, (rush-grass) *hallal*. Is used in constructing huts, throughout the whole territory of *Beit el Fakih*, towards *Djoblam*.

The leaves of the palm, *doum*, or *tafi*, are spread into layers, or mats, in which merchants cover goods sent by sea.

The gourd, *flaggon*, answers the purpose of vases: the fruit is smooth: often a foot and a half in diameter.

Scharbin, Cypress. Is used for sheathing of small vessels.

Shoubar, pinus odora, } used as

Gutran, pine } timbers.

Bolts; hard-wood from which fire is procured by friction simply.

Fuel is made of dry leaves, or of spungy pith, which takes fire readily.

Termis, lupines, make the best charcoal for powder to take fire.

Matches, or small inflammable cords, for the purpose of setting fire, to discharge their carbines, (as is customary in these countries) instead of striking

striking fire by a flint. The bark of trees is beaten, steeped in water, and twisted into the form of a cord. *F.*

It will be seen on the subject of Samson's *burners*, or *lamps*, Judges xv. that we desired further information respecting their nature, and referred to a plate of eastern lights, where indeed no further information appears; but the reader will accept it here. The Heb. *lampad* is rendered *fire-brand* in our public version; it was hardly burning, blazing wood, properly a fire-brand; but, might it be of the nature of these matches used for the purpose of carrying fire from place to place, in which, the fire, as usual in our own artillery matches, by a very slow combustion, burns *dead* for a time, yet when blown upon by wind, whether of the breath, or otherwise, rekindles its brilliancy, and communicates flame, as directed. Let us suppose for a moment, that the brands employed by Samson were these matches, "twisted into the form of a cord," and that *these*, not the jackall, were "turned tail to tail." The history would then stand thus:

"And Samson went and took three hundred *roving* jackalls themselves, and he took *long-burning* cord-matches, and turned them tail to tail, (the fire being at one end, the *other* end is the tail) and placed a single cord-match between two not-burning ends (tails) across. And he set fire to all the cord-matches, and sent then into the standing corn of the Philistines, &c. and, the jackalls roaming about, the matches burnt with vigour, and communicated their blaze to all combustibles, wherever they were carried."

That the word *tails* is capable of this sense, appears demonstratively from Isaiah vii. 4. "fear not, for the two *tails* of these smoking firebrands, Rezin," &c. where the same word is used for *tails*; but the word for *smoking fire-brands* is not the same as in the history of Samson: a difference deserving notice, for these probably intend burning *brands of wood*, and so the lxx. render the word. [Were the *lamps* of Gideon, Judges vii. these matches?]

The reader will consider the above with proper favour: at least, he will perceive by it that the minutest articles are not to be despised, but may occasionally illustrate Scripture, when more laboured comments struggle in vain with difficulties, which no verbal, or grammatical knowledge can remove. We have not directed every article to passages of Scripture; some have only a general bearing on biblical subjects, others are more specific: but the result of the whole is a conviction that further acquaintance with things, as they are actually extant in the East, at present, would enable us to explain many occurrences, and allusions to ancient ages, which we cannot hope to accomplish by any other mean.

FESTIVE PLANTS.

Plants of fragrancy, or of splendid flowers, are formed into crowns, and are used as ornaments to the head on joyful occasions. We are ignorant of the origin of this custom; unless we discover it in the antient *Floralia*.

Heart-pea (*cardiospermum*) *halicac.*

Thyme, *doush.*

Dianthera *odora.*

Inulo (elecampane) *odora.*

Trefoil, *remân.*

Ghosn. Sælem. Mimosa? Frequent in the mountains of *Abu Arisch.* The flowers are very red, and make splendid crowns. If this plant shoots numerous flowers the inhabitants expect a rainy or fertile year.

PLANTS USED IN DYEING.

Indigo, much cultivated, because of its blue colour, which is very pleasing to the people.

Polygala, its substitute? (*milk wort.*)

Orobanche, (broom rape,) dyes black the cords made of the narrow-leaved *corypha*, (palm.)

Madder, Arab. *fua*, the dried roots are sold at 2½, or 3 imperials *per frascle.* This is also a *rotl*, i. e. camel's load, in Arabic *hæml.* [Vide the article ANT in *Arrangement.*]

Suæda, *asal*, it yields sal alkali. Vide the article in *Arrangement.*

Mimosa nilotica. The bark of this tree is chosen in preference to others, for the preparation of skins; as it acts more speedily, and advantageously on them, during their maceration.

Haschiset ed dahal. If sheep eat of this plant for any time, their teeth become the colour of gold, and their flesh becomes yellow. The oil of this herb is deep yellow or gold colour. Had the Romans, (Virgil, for instance) any knowledge of such a property in this plant?

SELECTIONS FROM THE MATERIA MEDICA, USED AT CAIRO.

Unguis odoratus: (scented nail,) the shell covering of a snail. *Dofr al afrit*, "devil's nail." Is brought from Mocha, by way of Sues. The Arabs also bring it. A fumigatory is made of the black.

Hyssop, brought from Palestine.

Ebenus, Arab. *abnus* (wood) brought from Nigritia by the caravans, and from India by Sues. Only used by carpenters.

Santal, red, from India and *Hedjar.*

— white, from ditto.

Of these woods the strings of beads called *paternosters* are made.

Bechar marjam, brought from Syria and Palestine; rare; fragrant. Is thrown into boxes which contain clothes, as a preservative against moths, &c.

Ghaturschi, from Candia. Is frequently used

to stop bleedings: it is therefore employed in circumcisions of both sexes.

Mustard-seed, two kinds: 1. *Bizr kábar*: 2. *Bizr chardel*.

Seed, *nigella*, (fennel-flower) *habb saude*. Is brought from Upper Egypt; is used medically, and by bakers is mingled with bread.

Pistachia of the terebinth tree. *Habb el botm*, or *habb chadra*, brought from Greece.

Gum-Arabic, *samgh túri*, from Tór.

Mimosa acacia, *samgh Arabi*, from Negroland (Sennar) and Hedjás.

G. Mimosa nigrum, or *G. Arab. nigr. Samgh saidi*. Brought from Upper Egypt, used in making ink.

Ladanum, *laden*, from Candia. In time of pestilence is carried in the hand to be smelled to.

Manna, calabr. from Europe.

Myrrh, *mur*, from Arabia, but the best from Abyssinia.

The gardens in Arabia are much molested by apes, so that they are obliged to set watchers over them; the apes however do not meddle with the coffee-trees, but with the other fruit-trees placed between them.

.....

ANSWERS RECEIVED IN EXPLANATION OF SUNDRY HEBREW WORDS, AS PROPOSED TO VARIOUS PERSONS IN ARABIA, FOR THAT PURPOSE—SOME BY M. NIEBUHR, OTHERS BY M. FORSKALL. [from NIEBUHR'S *Descrip. Arab.*]

Arbeh, ארבה, are at *Bagdad*, and at *Maskat*, the locusts of passage, which devour all they meet with, and then go further.

Chagab, חגב, is also a locust known at *Maskat*.

Ridgeleim, רגלים, are the two hind legs of a locust.

Kirraim, כרעים, the joints of those legs.

The *erubé* of the lxx. Joel i. 4. &c. signifies, not only a louse; but also a little insect, which gets into sea-biscuit, corn, and other grain.

Delu is the Arabic name of a great leather bag, in which the Orientals draw up water from the wells.

The water machine which is turned by the feet, is called in Egypt, *sakkie tdir beridjel*.

El bochor is the generic name of perfumes. More than twenty kinds are reckoned in Arabia, of which not many are produced in the country itself.

Kinnamon, קנמון, *oud el bochor*, and *agadj oudi*, are the Hebrew, Arabic, and Turkish names of a wood called by the English *agal wood*, and by the Indians at *Bombay*, *agar*; of which there are two distinct kinds; 1. *Oud mawardi*, which is the best; 2. *Oud kakulli*, the weakest kind.

Ahalim, אהלים, is, according to the opinion of a Jew of *Maskat*, from whom I had explanations of the Hebrew words, the *santal wood*.

Copher, כפר, the flower of the henna.

Wormwood, (Heb. *lonch*, לענה.) Celsus thinks this is the Arabian *schihh*. The Arabian *schihh*, is an extremely bitter herb, used in medicine. Camels eat it willingly. Michaelis asks whether the Heb. *lonch* may derive from the Arab. *lan*, which he says, signifies *malediction*; NIEBUHR replies it imports an *oath*.

It appears that there are three ways of emasculating animals in Arabia: 1. Bruising, or crushing of the testicles: 2. Cutting off a part: 3. An opening of the parts to take out their contents. *Petjuo decah*, (פצוע דכה.) [Vide Deut. xxiii. 2.] signifies an eunuch, made so by crushing the parts. *Caruth shephecah* (כרות שפכה) signifies one rendered so by cutting off a portion. *Maksi*, is applied to the third manner: so that the phrase is *Tór maksí*, an ox: *kabsch maksí*, a goat gelded; *hussan maksí*, a gelding, (horse.) These last are rare in Arabia; and in many parts no such are made.

Sif. The Arabs relate of this serpent much the same stories as are told in Europe of the basilisk.

Charchar, (חרחר) Deut. xxviii. 22. denotes a person who breathes with difficulty; an asthmatic.

Lehem, the Hebrew for *bread*, and the Arabic also; never signifies at *Bazra*, or *Aleppo*, *land*, or country, but all sorts of food—*viandes*.

In Deut. xxviii. 22. and 1 Kings, viii. 37. we read of two diseases, *shidaphun*, and *jerakun*. Michaelis inclines to refer them to corn, and not to the human body. Niebuhr replies, that the Arabic word *muskure*, (by which *irakun* is rendered in Arabic Tr.) signifies a disease in corn, which closely resembles that which we call *mildew*, if it be not really the same disease. It is called at Cairo *ain el bint*, "girl's eyes." The Syriac word *schaubo* (by which the cause of this disease, understood to be the east wind, is rendered in Syriac Tr.) signifies among the Christians of *Mosul*, (*Nineveh*), worms in corn. [The reader will see, in EXP. IND. that the lxx. also refer to corrupted air (or *corrupting* air) on this subject; which is fully supported and illustrated by the subjoined information collected by M. FORSKALL.

Shediphun, in vegetables. When wheat or barley, is about two feet in height, it happens sometimes that a sharp cold injures the plant to such a degree that the ears do not form themselves.

Jerakun, is a wind dangerous at the seed time, which blows in the Jewish month *Marshevan*. (October.) It renders the ears yellow, and no grain forms itself. This wind blows only here and there; but it spoils every thing where it extends. F.

Iachmur is not known as the name of any animal, in the modern language of Arabia, neither at *Djedda*, nor around the Persian Gulph, nor at *Bazra*; but gazelles are found in Egypt, India, Persia, Arabia, and Syria. M. Forskall says it is known in the mountains of Yemen.

Apha

Apha is stated to be a serpent, so venomous, that his hissing is fatal. He is said to reside in the mountainous regions of Persia; to live above a hundred years, to change his appearance after a certain number of years, &c. [M. NIEBUHR has stopped here; but the reference of what he *does* say to the *Cockatrice* of Isaiah, xi. 14. and its residence in Persia, to that of the *Assyrian* serpent of Virgil, deserves notice. Vide this article, (plates) towards the close of it.]

Algomm is a word not known among the Arabs. Gums are called *semgk*.

Ramuth, (Job xxviii. 18. Ezek. xxvii. 16.) red coral. In Arabia called *murdsjan*.

Gabish (Job xxviii. 18.) is a green stone.

Adam, (Ezek. xxviii. 18.) is *el hummurie* of the Arabs, or the *jakout* of Ceylon: this *jakout* is a beautiful red precious stone, which comes from Ceylon.

Semekun is, it is said, a stone of a celestial blue colour.

Pithdah, the emerald. These names of precious stones were given me by a skilful and honest Jew of *Maskat*. Those of Bagdad and Aleppo of whom I made the same enquiries, seemed not to know these stones, or only to answer at hazard. The Arabic language, otherwise so rich in words, appears to be poor in names for precious stones; for many kinds are called *jakout*, adding the name of the colour to distinguish it;

as *jakout ahmar*, red jakout; *jakout asfar*, yellow jakout, &c.

[I would add here Michaelis's rendering of Prov. xvii. 8. where we read, "A gift is as a precious stone in the eyes of him that hath it; whithersoever it turneth itself it prospereth:" he would render "a gift is like a precious stone, and is of a beautiful appearance, if it be viewed on all sides," i. e. by the possessor of it. The rudiments of this sense may be now seen in our public version, but the ambiguity of expression obscures it.]

Suph, an aquatic plant.

Shurek, a graft.

Gazam, a species of locust.

The disease of Job, says MURI, was the *shechin*.

Bitter herbs, *mururim*. The Jews in *Sana* refer the lettuce to this passage, they eat lettuce with the paschal lamb; or if that be wanting, bugloss. In Egypt they likewise eat it with lettuce, (*lactuca-oleracea*.) M. FORSKALL remarks in another place, that *moru* is centaury, (*centaurea calcitrapa*), of which the young stems are eaten in February, and March.

Pekouth, 2 Kings, iv. 39. *Colocynth*.

Aral, (ארל) is a clean animal in the mountains of Yemen.

The female is called *ioleh*, says Muri.

Tjebi, the gazelle, inhabits Yemen.

Kikiun, gourds, (*flaggon*, perhaps.)

MISCELLANIES,

FROM SUNDRY AUTHORITIES.

DREADFUL EFFECTS OF THE DESTRUCTIVE SIMOON.—A. D. 1813.

Extract of a Letter from Smyrna.

"We have received intelligence of a dreadful calamity having overtaken the largest caravan of the season, on its route from Mecca to Aleppo. The caravan consisted of 2000 souls; merchants and travellers from the Red Sea and Persian Gulph, pilgrims returning from performing their devotions at Mecca, and a numerous train of attendants; the whole escorted by 400 military. The march was formed into three columns. On the 15th of August, they entered the great Arabian Desert, in which they journeyed seven days, and were already approaching its edge. A few hours more would have placed them beyond danger; but, alas! they were not permitted to return in safety.

On the morning of the 23rd, just as they had struck their tents, and commenced their march, a wind rose from north-east, and blew with tremendous violence. They increased the rapidity of their march, to escape the threatening danger; but the fatal Kamsin had set in. On a sudden, dense clouds were observed, whose extremity obscured the horizon, and swept the face of the desert. They approached the columns, and covered the line of march. Men and beasts, struck by a sense of common danger, uttered loud cries. The next moment they fell beneath its pestiferous influence—lifeless corpses. Of 2000 souls composing the caravan, not more than 20 escaped this calamity. They owed their safety to the swiftness of their dromedaries." *London Newspapers of October, 1813.*

SIN

SIN. SINNER. In endeavouring to explain a passage, Eccles. ix. 19. in the SUPPLEMENT to CALMET'S DICTIONARY of the Holy Bible, it was proposed to accept the allusion employed by the Holy Penman in reference to those costly vases which are procured by Princes, in the East, as well as in the West, for the purpose of ornamenting their apartments. Since that was written, an opportunity has offered of inspecting such vases; of which I availed myself, and examined those offered for sale by the following Advertisement, in which they are sufficiently described, to render further enlargement unnecessary. It must be sufficiently obvious, that a single *flaw*, in articles so costly and magnificent, is a striking and injurious defect;—equally detrimental in the public estimation, is the *flaw*—poverty, in an individual of the most consummate and useful wisdom.

"For Sale by Auction.

"Four uncommonly fine, elegant, and superb Oriental Porcelain Vases, of the most beautiful materials, and exquisitely delicate colours; stand three feet high; independent of the mounting, and were originally part of the rich embellishments of the late Tippoo Sultaun's palace at Seringapatam, decorating his private apartments, and brought to Europe by his ambassadors, and presented by them as a token of respect from their master to the unfortunate Queen of France. These vases have been magnificently mounted at Paris in *or molu*, of the best workmanship: for beauty and splendour, they cannot be matched; and are admirably adapted to form a conspicuous feature of attraction among the costliest ornaments in the most splendid cabinets in the kingdom."—*Times Newspaper, March 7, 1804.*

.....
EXTRACTS from Private Journals of BRITISH OFFICERS who visited Egypt with General Koehler, in the Army of the Grand Vizir, in 1801.

LAMBS, &c. in Separation for the Passover.

March 7, 1800.—Dr. Wittman saw, near Constantinople, for the first time, very young lambs. Their flesh is not allowed to be eaten in Turkey, till the month of April.

May 1.—In walking through the streets, saw a great number of sheep collected in pens for sale, as is the custom in England. This was preparatory to the feast of the Biram Courbam; when every Turk of any rank or condition was to sacrifice a sheep, and having eaten a portion of it, to distribute the remainder to the poor.

Extensive and beautiful PLANE TREE.

At Stanchio, a beautiful Oriental plane tree. From the outside of its branches to the opposite side 129 feet; its trunk 34 feet in circumference. Its enormous branches were supported by large

and beautiful columns of marble and granite,—about twenty in number. Beneath its shade was the tomb of a Turkish saint, with a fountain, and Turkish coffee-houses.—*Wittman, 114.*

Ceremonious Reception of the Orders of a SUPERIOR.

August 11, at Cairo.—The following ceremony is observed at the Divan, when the Grand Seignor's Hatcheriff comes to his Highness the Vizir:—

In the Divan, where all the Pachas, the Janissary Aga, and Chiefs of the Regiments, with the several Ministers and Secretaries, are assembled, the Reis Effendi brings in the Hatcheriff. The Chaouches, who are drawn up, as soon as he enters the door, cry out, with an audible voice, "May the Almighty bless his Greatness, and his Highness!" His Highness then rises; and all standing, his Highness walks to the middle of the Divan, taking the Hatcheriff from the hands of the Reis Effendi, *kisses it*, and carries it to his head. After which, the Reis Effendi reads the contents in a loud voice; and as soon as he has read it through, the Chaouches begin afresh to sing out, "God preserve our Sultaun, and his Highness!"—*Major Hope. MS.*

This may serve to illustrate the phrase used by Pharoah to Joseph, Gen. xli. 40—"and upon thy word—commands—orders—written edicts, shall all my people kiss;" which is the exact meaning of the Hebrew words used; and refers the custom denoted by this mark of respect, to the most remote antiquity.

.....

BALM, from Mr. BRUCE.

"The great value set upon this drug in the East remounts to very early ages; it is coeval with the India trade for pepper, and the beginning of it consequently lost in the darkness of the first ages. We know from Scripture, the oldest history extant, as well as most infallible, that the Ishmaelites, or Arabian carriers and merchants, trafficking with the Indian commodities into Egypt, brought with them Balm as part of the cargo, with pepper; but the price they paid for Joseph was silver, and not a barter with any of their articles of merchandise.

"Strabo alone, of all the ancients, hath given the true account of the place of its origin,—"Near to this," that historian says, "is the most happy land of the Sabaeans, and they are a very great people. Among these, frankincense, myrrh, and cinnamon grow, and in the coast, that is, about Saba, the Balsam also."

Along the West coast of the straits of Babel-mandel is its native country. It grows to a tree about fourteen feet high—without culture. The high country of Arabia was too cold to receive it.

CONFIRMATION OF MR. BRUCE'S VERACITY
on the subject of the ZIMB, or Ethiopian Fly.

Dr. E. D. Clarke, in his "Travels in Egypt, in 1810," &c. met, at Cairo, with an Abyssinian Dean, a negro, travelling to Jerusalem; from his testimony Dr. Clarke derived ample satisfaction on the general accuracy of Mr. Bruce; but as that traveller's account of the *Zimb*, or fly of Ethiopia, which pesters and even destroys the cattle, &c. on the pastures, and obliges their owners to take shelter in the desert, had been peculiarly adverted to, as incredible, by many;—and as Lord Valentia, when on the coast of the Red Sea, and Mr. Salt, when in the eastern parts of Abyssinia, could obtain no information respecting this creature, Dr. Clarke seized this opportunity of putting Bruce's veracity to the test. He observes, Vol. II. p. 65.

"If there be a part of Bruce's work apparently fabulous, from its marvellous nature, it is the account he has given of that destructive fly, the *Zimb*, or *Tsaltiese*; yet in the history of this insect, as in every other instance, the testimony of the Abyssinian Dean strictly confirmed all that Bruce had written on the subject. He told us that horses and cows were its principal victims; that there were not many of those insects in his native province; but that he had heard of armies being destroyed in consequence of this terrible scourge."

We may add, that Mr. Grey Jackson, in his "Account of Morocco," London, 1811, giving an account of the Gum Ammoniac plant, called *Feshook*, in Arabic, observes, "the sandy light soil which produces the Gum Ammoniac, abounds in the north of Morocco. It is remarkable, that neither bird nor beast is seen where this plant grows, the vulture only excepted. It is, however, attacked by a beetle, having a long horn proceeding from its nose, with which it perforates the plant, and makes the incisions whence the gum oozes out. p. 136.

Is this absence of bird and beast to be attributed to the offensive influence of the plant, or to the destructive power of the insect? Mr. Jackson's figure of the insect agrees exactly with Mr. Bruce's (but is larger), except in the weapon, which Mr. Jackson says is *one long horn*; but Mr. Bruce says, is *three stiff bristles*. These may be different species of the same insect. The vulture mentioned by Mr. Jackson, feeds on these insects, by hovering in the air, and darting down on them "*with astonishing rapidity*;" by this management, it is probably safe against the efforts of the beetle; while birds incapable of such rapidity, are unequal to the contest; and animals are repelled from the territory over which this insect tyrannizes. This must be left for future examination; which it well deserves. Mr. Jackson has stated in a private communication, that these beetles exist in thousands, and specimens might easily be obtained.—Called *Debben Feshook*.

A CIRCUMSTANCE IN THE HISTORY OF JOSEPH,
Genesis xxxix. 17. illustrated by Mr. SALT, from a similar Custom in Abyssinia.

.... "At last they became so troublesome, that Mr. Pearce laid hold on one, and tied him to an attendant, to answer for his conduct before the Ras."

"Having before noticed the practice of tying the garments of offenders, [to the garments of those who have them in custody] I may here take occasion to mention, that this singular custom appears to me to elucidate very clearly a passage in the Old Testament, which always struck me before as attended with considerable obscurity. In the story of Potiphar's wife and Joseph, it is mentioned that when she could not prevail on him to comply with her desires, "she caught him by the garment, and said, Lie with me! and he left his garment in her hand and fled, and got him out;" and when she accused Joseph to her husband, she produced the garment as an evidence of his guilt; saying, "The Hebrew servant which thou hast brought unto us, came in unto me to mock me: and it came to pass, as I lifted up my voice, and cried, *that he left his garment* with me and fled out;" and immediately on hearing these words, Potiphar's wrath was kindled," and Joseph was consigned to a prison. Now, it appears, upon reading this without explanation, that Potiphar, who seems to have been a good man, acted, on this occasion, with extreme injustice, as he does not seem to have made any enquiry into Joseph's guilt, but at once, on the assertion of his wife, commits him to a prison. On the contrary, if the same custom as the one which is now general in Abyssinia, at that time prevailed in Egypt, it will be seen, that Potiphar acted justly, according to the established rule of the country, it being *always considered as a sure proof of guilt*, which required no further evidence to be adduced, if a man, after being once laid hold of, runs away, *and leaves his garment behind.*" *Voyage*, p. 410.

MAGNIFICENCE OF THE LILLY OF THE FIELD
illustrated by MR. SALT. Voyage, p. 419.

"At a few miles from Adowa we discovered a new and beautiful species of *Amaryllis*, which bore from ten to twelve spikes of bloom on each stem, as large as those of the "*Bella-donna*," springing from one common receptacle. The general colour of the corolla was white, and every petal was marked with a single streak of bright purple down the middle. The flower was sweet-scented, and its smell, though much more powerful, resembled that of the lilly of the valley. This superb plant excited the admiration of the whole party, and it brought immediately to my recollection, the beautiful comparison used, on a particular occasion, by our Saviour; "yet I say unto you, that Solomon in all his glory was not arrayed like one of these." *Voyage to Abyssinia*. London, 1814.

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AND AMONG THE PLATES OF THIS WORK.

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